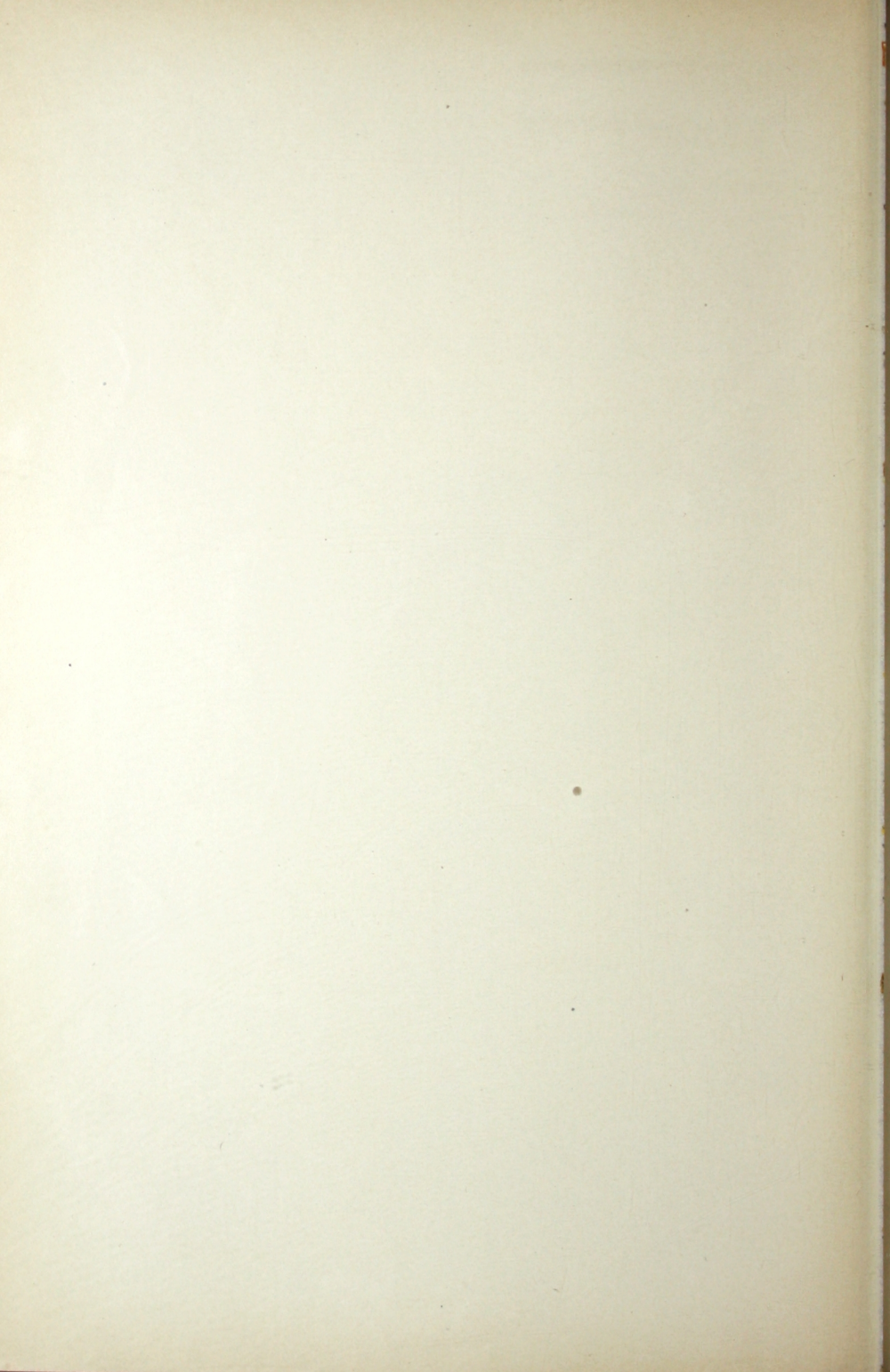


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Dec 21/94
174/04

J Knowles & Arch Jr. Boston.





PRICE LIST

... OF ...

Electrical Insulations



P. Knowles & Arch. Jr.

Boston.



... AND ...

—Specialties.

“Columbia” Taped White Core Wire.

DOUBLE RUBBER INSULATION.

Outside Insulation Black.

Inside Insulation White.

FOR 500 VOLTS.

SOLID CONDUCTOR.

Code Word	Size Gauge	Diam. over Insulation	List Price 1000 Ft
ADMIX	16 B. & S.	.125	\$23.50
ADORE	14	.141	28.50
ADORN	12	.172	29.00
ADRIFT	10	.203	53.50
ADROIT	8	.235	69.50
ADULT	7	.250	85.00
ADVERB	6	.297	109.00
ADVERT	5	.313	140.00
ADVICE	4	.344	152.00
AFFAIR	3	.375	180.00
AFFIRM	2	.406	215.00
AFFIX	1	.438	240.00
AFFLICT	1-0	.469	310.00
AFFLUX	1-0	.565	390.00
AFFRAY	3-0	.614	485.00
AFFRONT	4-0	.669	600.00

STRANDED CONDUCTOR.

Code Word	Size Gauge	Diam. over Insulation	List Price 1000 Ft
AFIELD	8 B. & S.	.297	\$105.00
AFLOAT	6	.330	129.00
AFRESH	5	.366	150.00
AGATE	4	.397	174.00
AGED	3	.437	207.00
AGHAST	2	.469	241.50
AGILE	1	.496	289.00
AGOG	100,000 C. M.	.536	334.00
AGUE	1-0 B. & S.	.566	357.00
AILMENT	125,000 C. M.	.580	387.00
AIRY	2-0 B. & S.	.596	406.00
ALACK	150,000 C. M.	.653	468.50
ALARM	3-0 B. & S.	.663	489.00
ALAS	200,000 C. M.	.698	557.00
ALBUM	4-0 B. & S.	.758	634.00
ALCOVE	250,000 M. C.	.788	711.00
ALDER	300,000	.858	847.00
ALERT	350,000	.898	944.00
ALIEN	400,000	.953	1037.00
ALIVE	450,000	.993	1155.00
ALLEGE	500,000	1.038	1280.00
ALLEY	550,000	1.108	1435.00
ALLOT	600,000	1.148	1530.00
ALLOY	650,000	1.168	1638.00
ALLURE	700,000	1.248	1790.00
ALMOND	750,000	1.268	1892.00
ALOE	800,000	1.315	2039.00
ALOFT	900,000	1.390	2260.00
ALTAR	1,000,000	1.450	2452.00
ALTO	1,250,000	1.585	3162.00
ALUM	1,500,000	1.869	3820.00
AMAIN	2,000,000	2.180	4796.00

"Columbia"

Braided Black Core Wire.

SINGLE RUBBER INSULATION.

For 500 Volts.

SOLID CONDUCTOR.

STRANDED CONDUCTOR.


Code Word	Size Gauge	Diam over Insulation	List Price 1000 ft	Code Word	Size Gauge	Diam. over Insulation	List Price 1000 ft
AMASS	18 B. & S.	.094	\$23.00	ANNALS	14 B. & S.	.170	\$52.50
AMBER	16 "	.125	25.00	ANNEX	12 "	.190	63.00
AMBLE	14 "	.157	30.00	ANNOY	10 "	.214	75.00
AMBUSH	12 "	.175	41.00	ANNUL	8 "	.241	84.00
AMIDST	10 "	.196	49.00	ANOINT	6 "	.292	105.00
AMOUR	8 "	.249	65.00	ANTHEM	4 "	.343	155.00
AMPLY	7 "	.266	85.00	ANTIC	3 "	.392	185.00
AMUCK	6 "	.282	95.00	ANTIQUE	2 "	.425	225.00
ANARCH	5 "	.322	125.00	ANTLER	1 "	.485	287.50
ANCHOR	4 "	.345	145.00	ANVIL	1-0 "	.540	330.00
ANCIENT	3 "	.370	165.00	APACE	2-0 "	.565	410.00
ANEW	2 "	.418	205.00	APART	3-0 "	.614	520.00
ANGER	1 "	.450	250.00	APEX	4-0 "	.709	620.00
ANGLE	1-0 "	.525	310.00				
ANGRY	2-0 "	.565	400.00				
ANISE	3-0 "	.610	500.00				
ANKLE	4-0 "	.660	580.00				

Please Order by Catalogue Code Word.



"Columbia"

Taped Black Core Wire.

FOR 500 VOLTS. 

Single Rubber
Insulation.

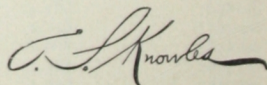
... SOLID CONDUCTOR ...

Code Word	Size Gauge	Diam. over Insulation	List Price 1000 ft.
APPALL	18 B. & S.	.094	\$21.00
APPEAL	16 "	.125	22.50
APPEASE	14 "	.157	27.00
APPEND	12 "	.175	37.00
APPLAUSE	10 "	.196	45.00
APPLY	8 "	.249	60.00
APRON	7 "	.266	80.00
APPLY	6 "	.282	90.00
ARCADE	5 "	.322	120.00
ARCHER	4 "	.345	140.00
ARCTIC	3 "	.370	160.00
ARDENT	2 "	.418	200.00
ARDOR	1 "	.450	240.00
ARGENT	1-0 "	.525	300.00
ARGUE	2-0 "	.565	390.00
ARIGHT	3-0 "	.610	485.00
ARMFUL	4-0 "	.660	560.00

STRANDED CONDUCTOR.

Code Word	Size Gauge	Diam. over Insulation	List Price 1000 ft.
AROUSE	14 B. & S.	.170	\$50.00
ARRAIGN	12 "	.190	60.00
ARRAY	10 "	.214	65.00
ARREST	8 "	.241	80.00
ARROW	6 "	.292	100.00
ARSON	4 "	.343	150.00
ARTIST	3 "	.392	180.00
ARTLESS	2 "	.425	220.00
ASCENT	1 "	.485	280.00
ASHES	1-0 "	.540	320.00
ASIDE	2-0 "	.565	400.00
ASKANCE	3-0 "	.614	500.00
ASLANT	4-0 "	.709	600.00

Please Order by Catalogue Code Word.



"COLUMBIA"

Braided Black Core Flexible Cable.

SINGLE RUBBER INSULATION.

Flexible Conductors for Switch Boards, Brush Holders, Dynamo and Motor Connections.

MADE UP OF 26 B. W. G. WIRE.

Code Word	Size Gauge	Diam. of Bare Wire	No. of Wires	Diam. of Gum	List Price 1000 ft
ASLEEP	18 B. & S.	.040	5	5-32	\$ 27.00
ASPEN	16 "	.051	8	5-32	27.00
ASPERSE	14 "	.064	13	7-32	36.00
ASPIRE	12 "	.081	21	8-32	54.00
ASSAIL	10 "	.102	35	9-32	72.00
ASSAY	8 "	.129	56	12-32	108.00
ASTER	7 "	.144	63	12-32	120.00
ASTRAL	6 "	.162	84	14-32	144.00
ASTRIDE	5 "	.182	105	14-32	180.00
ATLAS	4 "	.204	126	15-32	216.00
ATOM	3 "	.229	161	17-32	252.00
ATTAIN	2 "	.258	203	18-32	288.00
ATTIC	1 "	.289	259	20-32	324.00
AUBURN	1-0 "	.324	329	22-32	372.00
AUDIT	2-0 "	.365	413	24-32	432.00
AUTHOR	3-0 "	.410	518	26-32	528.00
AVAST	4-0 "	.460	651	28-32	648.00

"Columbia" Flexible Street Car Cables.

BRAIDED BLACK CORE.

SINGLE RUBBER INSULATION.

Code Word	Size Gauge	No. of Wires	Diam. of Gum	List Price 1000 ft
AVENGE	8 B. & S.	7-18 B. W. G.	10-32	\$72.00
AVERSE	6 "	49-32 B. & S.	11-32	97.50
AVAIL	5 "	49-23 B. W. G.	12-32	115.00
AVOW	4 "	49-22 B. W. G.	14-32	135.00
AWAKE	3 "	17-22 B. & S.	15-32	190.00
AWARD	1 "	133-22 B. & S.	18-32	250.00

Can be made, if desired, so that Insulation does not adhere to wire.

DOUBLE CONDUCTOR CABLES FOR INTERIOR CONDUIT WIRING. Concentric Stranded.

Code Word	B. & S. Gauge	List Price per 1000 ft. Single Rubber Inner Conductor Rubber Covered	Code Word	List Price per 1000 ft. Double Rubber Both Conductors Rubber Covered
AWFUL	2 No. 16	\$32.80	BABY	\$77.30
AXLE	2 " 14	42.00	BACON	101.20
AZURE	2 " 12	56.70	BARTER	137.00
BABBLE	2 " 10	77.40	BASALT	183.20

FLAT STRANDED. Both Conductors Rubber Covered.

Code Word	B. & S. Gauge	List Price Per 1000 ft. Conductors Composed of 7 Strands	Code Word	List Price per 1000 ft. Conductors Composed of No. 28 B. & S. Wire
BASHFUL	2 No. 16	\$42.70	BASTILE	\$52.40
BASIN	2 " 14	54.90	BATON	66.40
BASKET	2 " 12	71.60	BAITER	92.90
BASSOON	1 " 10	91.70	BATTLE	123.70

Incandescent Lamp Cord

... COLORS ...

Red, Blue, Green, Yellow, Red and Yellow, Green and Yellow,
Red and Green, Blue and Drab.

We will ship Green and Yellow, which is carried in stock, on all orders unless otherwise specified.

Put up in Coils of About 100 Yards Each.

— Rubber Insulation. —

Equal in Conductivity to	Conductor Made up of	Code Word	Cotton per yard	Code Word	Silk per yard
22 B. & S.	14 No. 34 Wires.	BAUBLE	7 cts.	BECKON	12 cts.
20 "	10 " 30 "	BAYOU	7 "	BEDAUB	12 "
18 "	16 " 30 "	BAZAAR	9 "	BEDREW	16 "
16 "	25 " 30 "	BEADLE	12 "	BEDIM	19 "
15 "	32 " 30 "	BEAKER	16 "	BEDLAM	23 "
14 "	40 " 30 "	BEARISH	21 "	BEDUCK	29 "
12 "	60 " 30 "	BEASTLY	32 "	BEEBLE	40 "

... FIREPROOF ...

Equal in Conductivity to	Conductor Made up of	Code Word	Cotton per yard	Code Word	Silk per yard
22 B. & S.	14 No. 34 Wires.	BEFALL	7 cts.	BELFRY	12 cts.
20 "	10 " 30 "	BEFOOL	7 "	BELLOW	12 "
18 "	16 " 30 "	BEGET	9 "	BEMOAN	16 "
16 "	25 " 30 "	BEGGAR	12 "	BENDER	19 "
15 "	32 " 30 "	BEGIRD	16 "	BENIGN	23 "
14 "	40 " 30 "	BEHEST	21 "	BENUMB	29 "
12 "	60 " 30 "	BEHOLD	32 "	BERATE	40 "

FIREPROOF AND RUBBER.

Equal in Conductivity to	Conductor Made up of	Code Word	Cotton per yard	Code Word	Silk per yard
22 B. & S.	14 No. 34 Wires.	BESMEAR	7 cts.	BIGOT	12 cts.
20 "	10 " 30 "	BESHREW	7 "	BILIOUS	12 "
18 "	16 " 30 "	BETRAY	9 "	BISHOP	16 "
16 "	25 " 30 "	BEVEL	12 "	BITTER	19 "
15 "	32 " 30 "	BEWAIL	16 "	BIVALVE	23 "
14 "	40 " 30 "	BEWITCH	21 "	BLANKET	29 "
12 "	60 " 30 "	BIBLE	32 "	BLARNEY	40 "

Please Order by Catalogue Code Word.

A. S. Knowles

"Knowles"

BRAIDED PENDANT CORD.

Glazed Black Cotton. Green and Yellow Silk.

Equal in conductivity to	Conductor Made-up of	Code Word	Cotton per foot	Code Word	Silk per foot
22 B. & S.	14 No. 34 Wires.	BLATANT	5 cts.	BLUNDER	6 cts.
20 "	10 " 30 "	BLAZON	5 "	BLUSTER	6 "
18 "	16 " 30 "	BLEMISH	6 "	BOBBIN	7 "
16 "	25 " 30 "	BLISTER	7 "	BODKIN	8 "
14 "	40 " 30 "	BLOTTER	10 "	BOILER*	12 "
12 "	60 " 30 "	BLUFFER	12 "	BOLSTER	14 "

"COLUMBIA" ELECTROLIER WIRE.

Special Sizes and Thickness

of Insulation made to order.

Single Conductor.

Size Gauge	Diam. of Rubber	Code Word	Plain per foot	Code Word	Braided per foot	Code Word	Taped per foot
20 B. & S.	.072	BONDAGE	1 1-2 cts.	BOTHER	1 3-4 cts	BOWLDER	2 cts.
18 "	.082	BOORISH	1 3-4 "	BOTTOM	2 1-4 "	BRACKET	2 3-8 "
16 "	.093	BORAX	2 1-4 "	BOUNTY	2 3-4 "	BRANDY	2 7-8 "
14 "	.128	BORROW	3 1-8 "	BOUQUET	3 5-8 "	BRAVO	3 3-4 "
12 "	.145	BOSOM	4 1-4 "	BOWER	4 7-8 "	BRAZEN	5 "

DOUBLE CONDUCTOR.

Plain Wire, Taped or Braided Together.

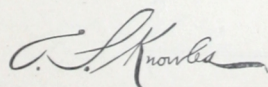
Size Gauge	Diam. of Rubber	Code Word	List Price Per ft
20 B. & S.	.072	BREEZY	3 $\frac{5}{8}$ cts.
18 "	.082	BREWER	4 $\frac{1}{4}$ "
16 "	.093	BRIDAL	5 $\frac{1}{8}$ "
14 "	.128	BRIDLE	7 $\frac{1}{8}$ "
12 "	.145	BRISKET	9 $\frac{1}{2}$ "

We wish to call attention to the particularly good quality of this Electrolier Wire.

Columbia Insulation is very strong and elastic which enables it to stand any amount of sharp bending. After years of service the rubber is as good as when first put in, and its insulating power can always be depended upon. All the wires are carefully tested before leaving the factory, and are certain to make thoroughly safe and good work.

Use **Samson Compound** for making joints in this wire.

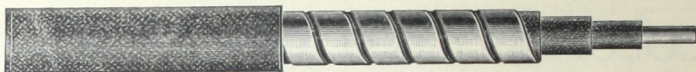
Please Order by Code Word.



PATENT METALLIC SHIELDED Wires and Cables.

Rubber Covered.

Anti-induction.



This invention **is without doubt** the **best method** of **preventing Induction** and **abrasion** of any yet produced. It is made of our high grade "Columbia" Rubber Insulation.

For Cities, Towns, Street Railways, and Electric Light Plants, whose lines run among trees, to resist abrasion, it is without a **peer**.

Please Order by Catalogue Code Word.

A. S. Knowles

...PATENT...

Metallic Shielded Wires and Cables.

Rubber Covered.

Anti-induction.

(Continued.)

COPPER WIRES.

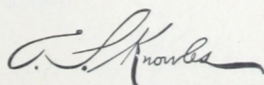
Size Gauge	Style of Wire	Approximate Weight per Mile	Code Word	Single Shield List Price 1000 ft.	Code Word	Double Shield List Price 1000 ft.
0000 B. & S.	37 Strands	5900 lbs.	BRITTLE	\$900.00	CALLOW	\$1000.00
0000 "	Solid	5800 "	BROGAN	800.00	CAMPHOR	900.00
000 "	Solid	5000 "	BROKEN	750.00	CANAL	800.00
00 "	Solid	4400 "	BROTHER	600.00	CANCER	650.00
0 "	Solid	4100 "	BRUISER	400.00	CANDLE	520.00
0 "	19 Strands	4200 "	BRUTAL	450.00	CANKER	500.00
1 "	Solid	2600 "	BUBBLE	330.00	CANNON	370.00
1 "	19 Strands	2970 "	BUCKET	350.00	CANOE	400.00
2 "	Solid	1840 "	BUGLE	230.00	CANVASS	260.00
2 "	19 Strands	1990 "	BUNDLE	250.00	CAPER	280.00
3 "	Solid	1475 "	BURDEN	180.00	CAPRICE	220.00
4 "	Solid	1190 "	BURGLAR	155.00	CAPSIZE	170.00
5 "	Solid	1050 "	BURNER	140.00	CAPSTAN	150.00
6 "	Solid	924 "	BUSKIN	110.00	CARAT	125.00
7 "	Solid	650 "	BUTTER	90.00	CARBON	105.00
8 "	Solid	525 "	BUXOM	70.00	CARESS	85.00
9 "	Solid	465 "	CABAL	65.00	CAROL	77.50
10 "	Solid	400 "	CABIN	62.50	CARPET	67.50
12 "	Solid	342 "	CACKLE	55.00	CARROT	60.00
14 "	Solid	241 "	CACTUS	47.50	CARTER	55.00
16 "	Solid	145 "	CADET	40.00	CASKET	45.00
18 "	Solid	95 "	CAITIFF	25.00	CASSOCK	40.00

Extra B. B. Iron Wires.

WEATHERPROOF INSULATION.

Old English Gauge	Code Word	Single Shield. List Price 1000 ft.	Code Word	Double Shield List Price 1000 ft.
6	CATCHER	\$100.00	CEDAR	\$110.00
7	CATER	80.00	CELLAR	85.00
8	CATTLE	65.00	CEMENT	75.00
9	CAUCUS	57.50	CENSOR	68.75
10	CATNIP	55.00	CENSUS	65.00
12	CAUDLE	50.00	CHAGRIN	62.50
14	CAUSTIC	45.00	CHARTER	57.50
16	CAUTION	40.00	CHATTER	52.50
19	CAVERN	37.50	CHEMIST	50.00

Please Order by Catalogue Code Word.



"Columbia"

Solid Weatherproof Wire.

... TRIPLE BRAIDED ...

Code Word	Size Gauge	Weight per 1000 ft.	Weight per mile	Price per pound
CHERRY	18 B. & S.	12 lbs.	63 lbs.	Add 6 1/2 c. to Base
CHERUB	16 "	16 "	84 "	" 4 1/2 c. "
CHICKEN	14 "	23 "	121 "	" 3 1/2 c. "
CHILLY	12 "	34 "	180 "	" 2c. "
CHINA	10 "	52 "	275 "	" 1c. "
CHORAL	8 "	77 "	400 "	Base.
CHORUS	6 "	110 "	580 "	"
CHOWDER	5 "	138 "	725 "	"
CHRISTEN	4 "	160 "	850 "	"
CHRONIC	3 "	207 "	1075 "	"
CHUCKLE	2 "	250 "	1300 "	"
CIDER	1 "	300 "	1580 "	"
CIGAR	1-0 "	400 "	2100 "	"
CINDER	2-0 "	500 "	2600 "	"
CIPHER	3-0 "	600 "	3150 "	"
CITRON	4-0 "	730 "	3850 "	"

"COLUMBIA" Solid Weatherproof Wire.

... DOUBLE BRAIDED ...

This wire will be made to order at same prices per pound as the Triple Braided.

CODE WORD, CIVET.

"Columbia" Stranded Weatherproof Wire.

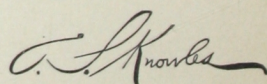
DOUBLE OR TRIPLE BRAIDED.

Stranded Wire, sizes 8 to 4-0 B. & S., will be furnished at the following advances *over* the price of Solid Wire:

Code Word	Per Pound
CIVIL	Stranded with No. 23 or 24 . . . 10c.
CLANGOR	" " " 21 " 22 . . . 6c.
CLARET	" " " 19 " 20 . . . 4c.
CLERGY	" " " 17 " 18 . . . 2 1-2 c.
CLIENT	" " " 14 " 16 . . . 1 1-2 c.
CLINKER	" " " 13 " coarser . . . 1c.

When the Strand is made up of two or more sizes of wire, use the price of the average size.

Please Order by Catalogue Code Word.



Weather=proof =



IRON LINE

WIRE.....


Double Braided._____.

For Fire Alarm, Telephone, Telegraph
and Burglar Alarm Construction.

EXTRA B. B. WIRE.

Code Word	Old English Gauge	Approximate Weight per Mile	List Price per Mile
CLOISTER	No. 16	118 Pounds.	\$35.00
CLONIC	" 14	180 "	38.00
CLOSET	" 12	269 "	40.00
CLOSURE	" 11	320 "	42.00
CLOTHING	" 10	378 "	45.00
CLOUDY	" 9	428 "	48.00
CLOVATE	" 8	500 "	50.00

PUT UP IN HALF-MILE COILS.

Triple Braided 

CODE WORD, CLOVER.

Iron Wire of Same Quality Furnished to Order.

Please Order by Catalogue Code Word.

Comparative Table

OF

Brown and Sharpe, and Birmingham Wire Gauges.

Giving the Diameter and Area of Each Size.

	Brown and Sharpe.		Birmingham. (Stubs.)	
Size No.	Diameter in Mils	Area in Circular Mils	Diameter in Mils.	Area in Circular Mils
0000	460.000	211600	454	206116
000	409.640	167805	425	180625
00	364.800	133079	380	144400
0	324.950	105593	340	115600
1	289.300	83694	300	90000
2	257.630	66373	284	80656
3	229.420	52634	259	67081
4	204.310	41742	238	56644
5	181.940	33102	220	48400
6	162.020	26250	203	41209
7	144.280	20817	180	32400
8	128.490	16510	165	27225
9	114.430	13094	148	21904
10	101.890	10382	134	17956
11	90.742	8234	120	14400
12	80.808	6530	109	11881
13	71.961	5178	95	9025
14	64.084	4107	83	6889
15	57.068	3257	72	5184
16	50.820	2583	65	4225
17	45.257	2048	58	3364
18	40.303	1624	49	2401
19	35.890	1288	42	1764
20	31.961	1021	35	1225
21	28.462	810	32	1024
22	25.347	642	28	784
23	22.571	509	25	625
24	20.100	404	22	484
25	17.900	320	20	400
26	15.940	254	18	324
27	14.195	201	16	256
28	12.641	160	14	196
29	11.257	127	13	169
30	10.025	101	12	144
31	8.928	80	10	100
32	7.950	63	9	81
33	7.080	50	8	64
34	6.304	40	7	49
35	5.614	32	5	25
36	5.000	25	4	16
37	4.453	20		
38	3.995	16		
39	3.531	12		
40	3.144	10		

Please Order by Catalogue Code Word.

A. S. Knowles

Rubber Friction Tapes.

TENAX AND SAMSON.

Made to order in any special width, the three-quarter inch width being the only **Stock Size**.

"TENAX" brand is our old standby of which we have produced thousands of pounds and have not had one ounce returned in over eighteen

(18) months. It is made of Stiff Rubber Compound and while not as sticky as our "Samson" is enough so to adhere securely. It is especially adapted for Street Railway Work and for insulation in manufacturing electrical apparatus. It is guaranteed not to oxydize the wire.



Can Cut either Straight or Bias, Black or White, in any Width.

Code Word, **CLUMSY** List Price per Pound - \$.60

"SAMSON" brand is made of a softer rubber than our celebrated "Tenax" and is therefore more sticky and satisfies the demand for a soft, sticky, adhesive Tape, although in our opinion a harder friction will give the best results in the long run.

It is recommended for use by linemen and for house wiring of all descriptions. It is guaranteed not to oxydize the wire.

Can Cut either Straight or Bias, Black or White in any Width.

Code Word, **CLUTTER** List Price per pound - \$.60

N. B. We can furnish either "Tenax" or "Samson" Friction Tape in full rolls thirty-six (36) or forty (40) inches wide, up to one hundred (100) yards to a roll in one piece. This is known generally as Friction Cloth.

Code Word, **CLYSMIC** List Price per pound - \$.60

Please Order by Catalogue Code Word.

A handwritten signature in cursive script, reading "C.S. Knowles". The signature is written in dark ink and is positioned at the bottom right of the page.

Splicing Compounds.

TENAX AND SAMSON.

Our "**TENAX**" Splicing Compound has been upon the market so long, has been used so extensively that remarks here are unnecessary. Remember it adheres and becomes a solid mass without heat, and will never become hard or cracked, unless exposed to the rays of the sun which vulcanize it under strain.

Code Word, **COBALT**

List price per pound, \$.70

Our "**SAMSON**" Splicing Compound is especially adapted for out door work. It is made of Para Rubber and will not crack when exposed to the sun. Like Okonite Compound it requires heat to make secure joints.

Code Word, **COBWEB**

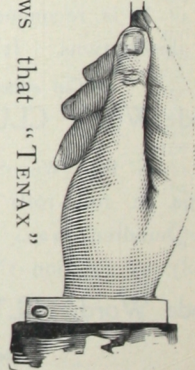
List price per pound, \$1.20

Please Order by Catalogue Code Word.



3=4 inch Wide.

THIS little experiment shows that "**TENAX**" splicing compounds sticks by the force of its own elasticity.



C.S. Knowles

ARMALAC.

Insulating Varnish or Paint should be as *reliable* as high grade porcelain. It must be *above* suspicion, permanently infallible.

In the production of **ARMALAC** every material commercially available for electrical insulation was thoroughly tested by skilled chemists who thoroughly understand the requirements of practical motor and dynamo construction. The object sought was to secure the best result regardless of cost or labor.

ARMALAC is used by the largest railway and construction companies on the American continent and in Europe. Hundreds of railway engineers will use nothing else, knowing that its constant quality is maintained by an inexorable testing system in one of the best equipped electrical testing laboratories in the world.

Where machine efficiency is at stake we submit that insulation made by expert specialists is preferable to the rule-of-thumb products of even the best intentioned paint and varnish makers.

Code Word,	COLLAR	1 to 10	Gallon Cans,	Price per	Gallon,	\$2.00
"	COLLEGE	1-2	Barrel,	"	"	\$1.75
"	COMET	1	"	"	"	\$1.65

POWER=HOUSE PAINT.

Black Paint for the general work about a power house should be brilliantly glossy, durable enough to *stay on* steam pipes and boiler fronts and thoroughly protect iron work from *rust* and wood from decay; rapid drying almost instantaneous and an insulation constantly maintained at the highest standard by the scientific testing methods of this progressive age.

POWER-HOUSE PAINT is all *that* and incidentally it demonstrates that the word "insulation" is not always accompanied by a bad smell.

Code Word,	COMFORT	One	Gallon Can,	-	Price,	\$.85
"	COMMA	Two	"	"	"	1.50
"	COMPASS	Five	"	"	"	3.25
"	COMPRESS	Ten	"	"	"	5.00
"	CONCEIT	Half Bls. average cap.	26 gal.	"	"	10.00
"	CONFIDENT	Barrels	"	47	"	16.00

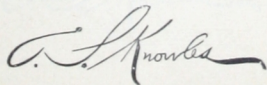
ENAMELAC.

For producing highly lustrous smooth and waterproof surfaces upon wood or iron. Insulates to the highest degree. Resists the action of acids and alkalis. Dries very rapidly, so that on fences, etc., "paint" signs need not be put up. Resists fire.

The diluting materials or thinners for this paint are turpentine or naphtha.

Code Word,	CONDEMN	1 to 10	Gallon Cans,	per	Gallon	\$1.00
"	CONFESS	1-2	Barrel	"	"	.90
"	CONFIDE	1	Barrel,	"	"	.80

Please Order by Catalogue Code Word.



Paragon Tape.



This is made of first quality sheeting, covered with a thoroughly adhesive waterproof insulating compound, and is adapted for special work, such as winding Fields, and covering Underground Conductors.

Code Word, COCKNEY

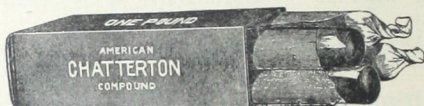
List Price per Pound, \$.50

ARMATURE TAPES.

We are prepared to furnish, at short notice, any special or standard grades and widths of Cotton or Linen Tapes, Bleached or Unbleached, for armature work.

Code Word. COCOA

Chatterton Compound.



The "American" Chatterton Compound is conceded to be better than the Imported Brands, being made from the purest materials that can be purchased. It is the best article in the market for Insulation.

When mixed with Gas-Fitter's Cement, it is unsurpassed for sticking mica to itself or to Insulating Papers.

Code Word, COCOON List Price per pound, \$1.05

GAS FITTERS' CEMENT.

This Cement is used extensively in Electrical Work, to take the place of Red Lead, and for the filling in the back of Porcelain Cut-outs, Rosettes, etc.

When mixed with Chatterton Compound, it makes the best material for sticking mica to itself or to Insulating Papers.

Code Word, CODGER List price per pound, \$.08

Please Order by Catalogue Code Word.

ARMALAC.

Insulating Varnish or Paint should be as *reliable* as high grade porcelain. It must be *above* suspicion, permanently infallible.

In the production of **ARMALAC** every material commercially available for electrical insulation was thoroughly tested by skilled chemists who thoroughly understand the requirements of practical motor and dynamo construction. The object sought was to secure the best result regardless of cost or labor.

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"	COMET	1 "	" "	\$1.65

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"	COMMA	Two "	" "	"	1.50
"	COMPASS	Five "	" "	"	3.25
"	COMPRESS	Ten "	" "	"	5.00
"	CONCEIT	Half Bls. average cap.	26 gal.	"	10.00
"	CONCERT	Barrels	" " 47 "	"	16.00

ENAMELAC.

For producing highly lustrous smooth and waterproof surfaces upon wood or iron. Insulates to the highest degree. Resists the action of acids and alkalies. Dries very rapidly, so that on fences, etc., "paint" signs need not be put up. Resists fire.

The diluting materials or thinners for this paint are turpentine or naphtha.

Code Word,	CONDEMN	1 to 10 Gallon Cans,	per Gallon	\$1.00
" "	CONFESS	1-2 Barrel	" "	.90
" "	CONFIDE	1 Barrel,	" "	.80

Please Order by Catalogue Code Word.



PHOENIX RUBBER Insulating Paint.

THE Phoenix Rubber Insulating Paint is manufactured from a newly discovered valuable mineral, that is extremely rich in its own natural oils.

A strictly first-class insulating paint, for armatures, fields, switchboards, conduits, iron and wood poles, connections, mouldings, wires, cut-out boxes, lamp hoods, and all other kinds of electrical appliances where high insulation is desired.

It contains no crude asphalts, tar or other deleterious substances.

It makes a lasting gloss equal to varnish.

Does not crack, blister or peel off.

Not affected by any extremes of climates.

Can be used successfully on higher heated surfaces than any known paint, as it loses none of its properties under 550° to 600° of heat, Fahrenheit.

The diluting materials or thinners for this paint, are turpentine or naphtha.

Unsurpassed for dipping iron, water and gas pipes, iron castings, etc.

Lasts longer than any known insulating paint.

Surfaces coated with Phoenix Rubber Insulating Paint, when dry, have no **odor** or taste.

Perfect as an insulating material.

Code Word	CONFUTE	1 to 10 Gallon Cans, per gallon,	\$1.50
" "	CONGEAL	1-2 Barrel,	" " 1.25
" "	CONJURE	1 "	" " 1.00

"COLUMBIA"

Black Paint.

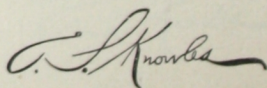
.....SOME OF THE USES FOR THIS PAINT.....

Coal Mines,	Distilleries,	Dynamite Works,
Electrical Purposes,	Packing Houses,	Gas Houses,
Galvanizing and Plating Works,	Iron Work,	Railroad Uses,
Locomotive Smoke Stacks,	Acid Works,	Breweries,
Wood Work,	Smelting Plants,	Cider and Vinegar Works,
Refrigerator Cars,	Water Works,	Brick Work,
Chemical and Fertilizing Plants,	Tanneries,	Boilers,
	Ice Machines and Ice Manufactories.	

Invaluable in all cases for the PROTECTION of WOOD and IRON from the action of ACIDS and ALKALIES.

Code Word	CONQUER	1 to 10 Gallon Cans, per Gallon,	\$.65
" "	CONSORT	1-2 barrel,	" " .50
" "	CONSPIRE	1 "	" " .40

Please Order by Catalogue Code Word.



Insulating Papers.

We make a specialty of supplying to the manufacturers of **Electrical Apparatus**, different classes of papers, for Insulation purposes, and also to **Electric Light and Street Railway Companies**, for repairs.

Knowing the requirements for these repairs, we furnish and recommend only the highest qualities, although we can supply the cheaper grades for some classes of work.

Code Word			
CONTEMPT	"Samson" Red Rope Armature Paper, per pound,	-	\$.10
CONTRAST	" Manilla " " " " "	-	.10
CONTUSE	"Columbia" Red " " " " "	-	.08½
CONVENT	" Manilla " " " " "	-	.08½
CONVEX	"Samson" Press or Fuller Board, any color, free from burnt spots, per pound	-	.10
COOLIE	"Columbia" Press or Fuller Board, any color, free from burnt spots, per pound	-	.08
COPAL	Leatheroid, in sheets per pound	-	.30
COQUETTE	Japanese Tissue Paper, size 21 in. x 13¼ in. per 500 sheets	2.50	
CORAL	" " " " 21 " x 24 ¼ " " " "	4.50	

❁ "Columbia" ❁

. . Insulated Cloth and Paper . .

In putting our "Columbia" Cloth and Paper on the market, we do so being fully satisfied from tests made for us, and from the success obtained through use by some of the largest manufacturers of Electrical Apparatus, that it is Electrically and Mechanically perfect.

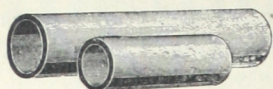
Nothing but **strictly pure linseed oil** is used in Coating the "Columbia" Cloth and Paper. Samples suitable for **tests** will be furnished on application.

Code Word	Material	Length	Width	Price
CORNET	No. 1 Cloth	2 yards	36 inches	Per Yard \$.30
CORRUPT	" 2 "	2 " "	24 " "	" " .26
CORNICE	" 3 " Extra Heavy	2 " "	36 " "	" " .35
COTTAGE	" 4 " Irish Linen	2 " "	36 " "	" " .65
COUPLET	" 1 Paper Sheets	24 inches	19 " "	" Sheet .09
COURAGE	" 1 " "	34 " "	22 " "	" " .14½

Please Order by Catalogue Code Word.

A. S. Knowles

= Hard Rubber =



We manufacture Hard Rubber, Tube, Rod and Sheet in three grades for Tooling purposes. No. 1 is for a very high polish and is used for the finest classes of work. No. 2 will take a high polish but not quite as effectually as No. 1. No. 3 will take a moderate polish and is used principally by the Electrical Manufacturers.

SEE OTHER PAGES FOR SPECIALTIES.

Code Word,	COUNTY	No. 1 Grade, per pound	- \$1.00
" "	COUSIN	No. 2 Grade, per pound	- .90
" "	COVET	No. 3 Grade, per pound	- .70

SOFT RUBBER.

The principal **Soft Rubber** materials carried in stock for insulating are as follows:

Styles	"SAMSON"		"COLUMBIA"		STANDARD	
	Code Word	Per Pound	Code Word	Per Pound	Code Word	Per Pound
Pure Rubber Packing,	COWARD	\$.75	CRANNY	\$.60	CREVICE	\$.40
Cloth Insertion Packing,	CRADLE	.15	CREMATE	.12	CRICKET	.10
Pure Rubber Cord, Round,	CRAFTY	1.00	CREOLE	.75	CRIMSON	.40
" " " Square.	CRANKY	1.00	CRESCENT	.75	CRIPPLE	.40

Please Order by Catalogue Code Word.

Soft Rubber Tubing.

We call special attention to the excellent quality of our Tubing, as well as to the beauty of finish and insulating qualities.

PLAIN WHITE OR BLACK

Thickness of Wall 1-8 inch			Thickness of Wall 3-32 inch		Thickness of Wall 1-16 inch	
Interior Diameter	Code Word	Per foot	Code Word	Per foot	Code Word	Per foot
1-8 inch	CRISIS	\$.08	CUDDLE	\$.08	CUTLET	\$.08
3-16 "	CRITIC	.12	CULPRIT	.12	CUTLER	.12
1-4 "	CROCUS	.16	CURDLE	.16	CYCLE	.16
5-16 "	CRONY	.18	CURFEW	.18	CYCLONE	.18
3-8 "	CROQUET	.20	CURTAIN	.20	CYNIC	.20
1-2 "	CROSIER	.25	CUSHION	.25	CYPRESS	.25
5-8 "	CRUSHER	.30	CUSTARD	.30	DABBLE	.30
3-4 "	CRUSADE	.35	CUSTOM	.35	DACTYLE	.35
1 "	CRYSTAL	.45	CUTLASS	.45	DADDY	.45

CORRUGATED, WHITE OR BLACK

Thickness of Wall 1-8 in.			Thickness of Wall 3-32 in.		Thickness of Wall 1-16 in.		Cloth Insertion. White or Black. Special Strength	
Interior Diameter	Code Word	per foot	Code Word	per foot	Code Word	Per foot	Code Word	Per foot
1-8 inch	DAINTY	\$.08	DEBASE	\$.08	DELIGHT	\$.08	DERIDE	\$.10
3-16 "	DAISY	.12	DEBRIS	.12	DELUGE	.12	DERRICK	.14
1-4 "	DAMASK	.16	DECAY	.16	DEMAIN	.16	DERVISH	.18
5-16 "	DAMPER	.18	DECENT	.18	DEMON	.18	DESCENT	.20
3-8 "	DAMSEL	.20	DECLAIM	.20	DENTAL	.20	DESIST	.23
1-2 "	DANDY	.25	DECOY	.25	DEPICT	.25	DESPAIR	.28
5-8 "	DAPPLE	.30	DEFAME	.30	DEPLOY	.30	DESPISE	.33
3-4 "	DAZZLE	.35	DEFECT	.35	DEPORT	.35	DESPOT	.38
1 "	DEADEN	.45	DEFRAY	.45	DEPRAVE	.45	DETACH	.50

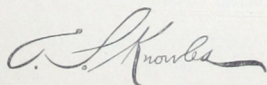
White Tubing will be shipped on **all orders** unless otherwise specified.

Plain and Corrugated made in 50 ft. lengths. Cloth Insertion in 12 ft. lengths.

Can make Plain and Corrugated in 500 ft. lengths

Code Word,	DETAIL,	Pure Black Tubing,	Price per pound, \$2.50
" "	DETER,	" White "	1-16 inch, inside diameter, " " 1.00
" "	DETEST,	" " "	1-32 " " " " 2.00
" "	DETRACT.	" " "	1-64 " " " " 2.50

Please Order by Catalogue Code Word.



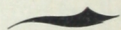
Asbestos



All Asbestos is not suitable for Electrical purposes because of the iron properties abounding where it is mined.

Our specialty has been to furnish to the Electrical Trade, an article that is non-conductive, and to accomplish this, special machinery has been devised to free the crude Asbestos from iron.

Our "Columbia" Brand of Sheathing and Mill Board

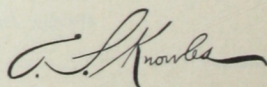


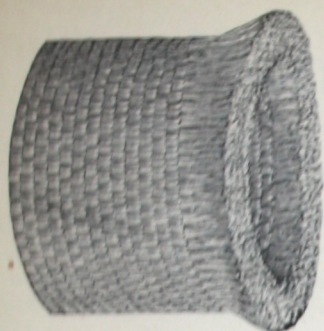
is therefore, the best adapted for manufacturers of Electrical Apparatus and for Street Railroads.

CODE WORD, DETORT, SHEATHING OR MILL BOARD, PER POUND, \$. 10

In ordering, always specify thickness desired.

Please Order by Catalogue Code Word.





Controller Cable Hose.

Size.	LINEN.		COTTON.	
	Code Word	Price Per Foot	Code Word	Price per Foot
1 inch	DEVISE	6 cents.	DINNER	5 cents.
1 1-4 "	DEVOTE	7 "	DIPPER	6 "
1 1-2 "	DEXTER	10 "	DIREFUL	9 "
2 "	DICTION	12 "	DIRTY	10 "
2 1-4 "	DIGEST	16 "	DISCARD	12 "
2 1-2 "	DIGRESS	18 "	DISCLOSE	16 "
3 "	DILUTE	22 "	DISCUS	20 "
3 1-2 "	DIMPLE	25 "	DISEASE	22 "

Flexible Controller Cables.

Code Word	Size (B & S G)	No. of Strands.	Size of Strand.	Diameter.	Price per 1000 ft.
DISGRACE	8	7	18 B. W. G.	10-32 in.	72.00
DISGUST	6	49	23 B. & S.	11-32 "	97.50
DISJOINT	5	49	23 B. W. G.	12-32 "	115.00
DISMAY	4	49	22 B. W. G.	14-32 "	135.00
DISMISS	3	97	22 B. W. G.	15-32 "	190.00
DISPENSE	1	133	22 B. & S.	18-32 "	250.00

Porcelain

Feeder Floor Insulators.

Length under head 3 inches.

Code Word.	DISPLAY	2 3/4 inch Hole.	Price per 100,	\$35.00
"	DISPUTE	1 3/4 " " " "	100,	35.00
"	DISSECT	1 1/2 " " " "	100,	35.00



Porcelain

Feeder Wall Insulators.

Length under Head 4 inches.

Code Word.	DISTICH	Solid 2 1/4 in. Hole	Price per 100,	\$30.00
"	DISTORT	" 1 3/4 " " " "	100,	30.00
"	DISTRUST	" 1 1/2 " " " "	100,	30.00

Code Word.	DISUSE	Split 2 1/4 in. Hole	Price per 100,	\$30.00
"	DIVAN	" 1 3/4 " " " "	100,	30.00
"	DIVERGE	" 1 1/2 " " " "	100,	30.00



SOLID.


Underground Cables

.... FOR

ELECTRIC LIGHTING.

We have in the past few years taken a number of large Contracts for furnishing Underground Cables of either **Rubber, Paper** or **Jute Insulation**, and also for drawing them into conduits.

Our success has led us to make a

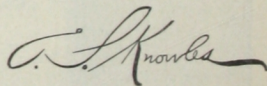
 Specialty of this class of Work.

When in the market we hope to have an opportunity of naming prices and submitting samples of our work.

Code Word, DIVERT.

No Contract too Small }
No Contract too Large } for us to execute.

Please Order by Catalogue Code Word.



"VOORHEES" Fuse Rosettes

... ALREADY FUSED ...

From the accompanying cuts it is at once apparent this Rosette meets the need of a rosette with a fuse, of a cleat pattern.

There are no metal parts projecting, which make it practically water-proof.

Packed Six in a Box.

Code Word	DOCILE	Cleat,	Price each, \$.15
" "	DOCKET	Concealed,	" "	.15
" "	DODGER	Moulding,	" "	.15

Prices Include Fuses.

COLUMBIA

INCANDESCENT SOCKET.

Patented.

In putting this **Socket** upon the market we have tried to overcome the objectionable features that exist in some makes.

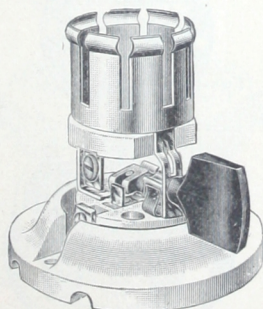
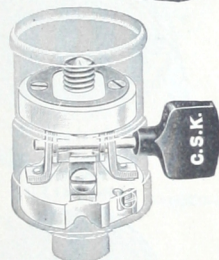
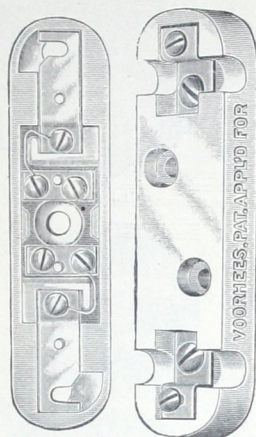
The shell for the Shade Holder to attach to is rigid, will not wobble. The Contact Shell in the case of the Westinghouse socket is placed deep enough in the shell so as to give good support to the lamp. It is made of good weight metal throughout, and Non-Absorbent Porcelain.

Code Word,	DOLPHIN	Key,	Thomson-Houston,	Price each, \$.18
" "	DORIC	"	Westinghouse	" "	.18
" "	DORMER	Keyless,	Thomson-Houston,	" "	.16
" "	DOTAGE	"	Westinghouse,	" "	.16

Wall Sockets.

Code Word,	DOWDY	Key,	Thomson-Houston,	Price \$.25
" "	DRAGON	"	Westinghouse	" "	.25
" "	DRAMA	Keyless,	Thomson-Houston,	" "	.20
" "	DRAPER	"	Westinghouse,	" "	.20

Please Order by Catalogue Code Word.



KEY WALL SOCKET.

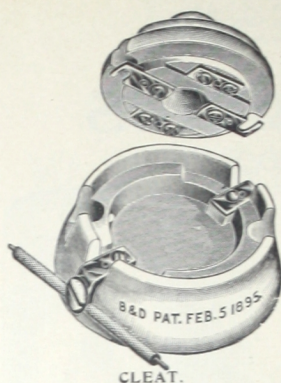
A. S. Knowles

“B and D”

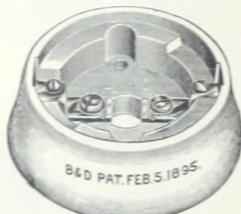
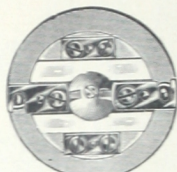
FUSE

Rosettes.

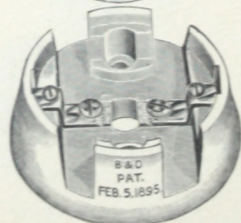
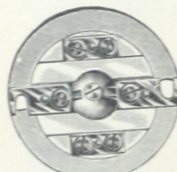
Patented February 5th, 1895.



CLEAT.



CONCEALED.



COMBINATION.

From the illustrations can be seen the new and effective method of attaching the conducting wires to the rosette which is the principle of the *wedge*.

It is *unnecessary* to turn the binding screws tight to secure the wire, as by a *slight turn*, the wire is firmly held in position.

Beyond all other advantages, it is easily put up and *will not shake loose*, either at the contacts or the base.

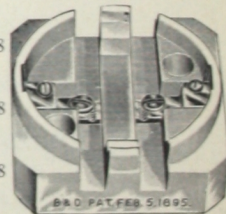
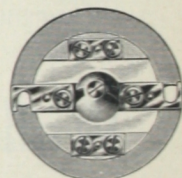
Packed One in a Box.

Code Word DRIBBLE Cleat,
Price each, \$.18

Code Word DRIZZLE Concealed,
Price each, .18

Code Word DROPSY Moulding,
Price each, .18

Code Word DUCAL Combination,
Price each, .18



MOULDING.

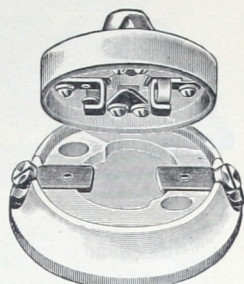
Please Order by Catalogue Code Word.

A. L. Knowles

Schaffer

Ceiling Rosettes

Code Word, DUMPISH Price Each, \$.15

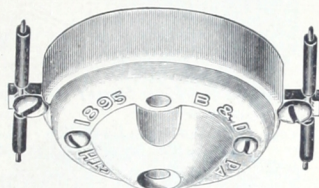


CLEAT.

“B and D” Rosettes.

Patented February 5th, 1895.

This Rosette has the same style of contact as the “B and D” Fuse Rosette. It is designed to be used where fusing is not required.



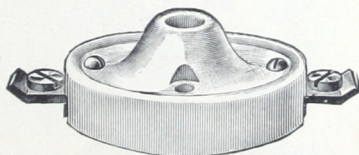
Code Word, DUSKY Price Each, \$.08

Cartwright

Fuseless Rosettes.

Patented Dec. 16, 1890 and April 21, 1891.

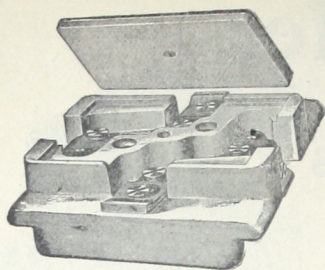
The “Cartwright” is so familiar to the Electrical Trade that further description than the cut is unnecessary.



Code Word, DUTY Price Each, \$.08

Please Order by Catalogue Code Word.

A. S. Knowles



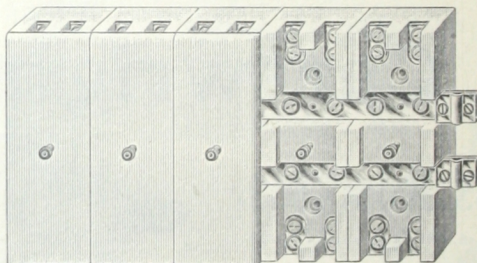
Sawyer-Man Cut-outs.



Lugs at base of Contact.

	10 AMPERES		25 AMPERES	
	Code Word	Price Each	Code Word	Price Each
Main (with Porcelain Cover)	DWELLER	\$.20	EASY	\$.40
“ (Uncovered)	DYING	.18	EBONY	.30
Branch (with Porcelain Cover)	EAGLE	.20	ECLAT	.40
“ (Uncovered)	EARTHLY	.18	EDICT	.30
	50 AMPERES		100 AMPERES	
	Code Word	Price Each	Code Word	Price Each
Main (with Porcelain Cover)	ELDER	\$.75	EMBARK	\$ 1.25
“ (Uncovered)	ELATE	.60	EMBERS	1.00
Branch (with Porcelain Cover)	ELBOW	.95	EMBLEM	1.50
“ (Uncovered)	EMBALM	.80	EMBRACE	1.25

Porcelain Sectional Circuit Board.



Code Word			Price Each,	
EMBROID	2 Circuit		\$ 1.60	
EMERGE	4 “	“ “	3.20	
EMPIRE	6 “	“ “	4.80	
EMPLOY	8 “	“ “	6.40	
EMPRESS	10 “	“ “	8.00	
ENACT	12 “	“ “	9.60	
ENCAMP	14 “	“ “	11.40	

Please Order by Catalogue Code Word.

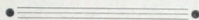
A. S. Knowles

Porcelain ^{BASE}



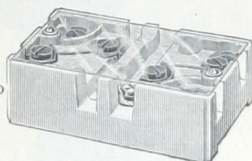
Link Cut-outs.

(WITH MICA COVERS.)



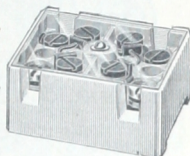
No. 1435, Code Word, ENCHANT

Price each, \$.90

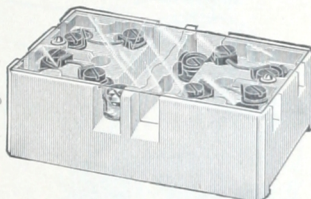


No. 1465, Code Word, ENDEAR

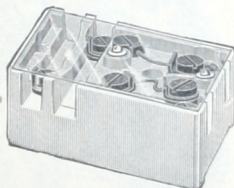
Price each, \$.77



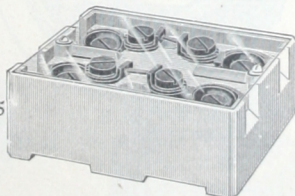
No. 1487, Code Word, ENDOW Price each, \$ 1.80



No. 2835, Code Word, ENGRAVE Price Each, \$ 1.10

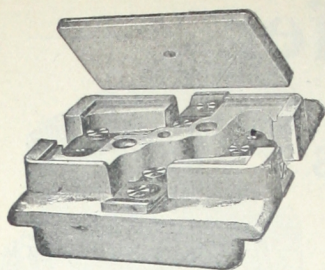


No. 1565, Code Word, ENGROSS Price each, \$1.65



Please Order by Catalogue Code Word.

A. S. Knowles



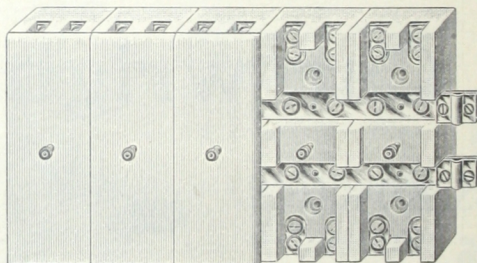
Sawyer-Man Cut-outs.



Lugs at base of Contact.

	10 AMPERES		25 AMPERES	
	Code Word	Price Each	Code Word	Price Each
Main (with Porcelain Cover)	DWELLER	\$.20	EASY	\$.40
" (Uncovered)	DYING	.18	EBONY	.30
Branch (with Porcelain Cover)	EAGLE	.20	ECLAT	.40
" (Uncovered)	EARTHLY	.18	EDICT	.30
	50 AMPERES		100 AMPERES	
	Code Word	Price Each	Code Word	Price Each
Main (with Porcelain Cover)	ELDER	\$.75	EMBARK	\$ 1.25
" (Uncovered)	ELATE	.60	EMBERS	1.00
Branch (with Porcelain Cover)	ELBOW	.95	EMBLEM	1.50
" (Uncovered)	EBALM	.80	EMBRACE	1.25

Porcelain Sectional Circuit Board.



Code Word			Price Each,	
EMBROID	2 Circuit		\$ 1.60	
EMERGE	4 "	" "	3.20	
EMPIRE	6 "	" "	4.80	
EMPLOY	8 "	" "	6.40	
EMPRESS	10 "	" "	8.00	
ENACT	12 "	" "	9.60	
ENCAMP	14 "	" "	11.40	

Please Order by Catalogue Code Word.

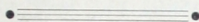
A. S. Knowles

Porcelain ^{BASE}



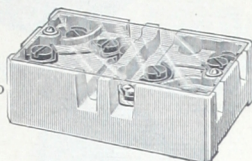
Link Cut-outs.

(WITH MICA COVERS.)



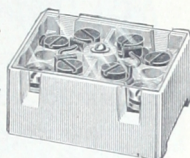
No. 1435, Code Word, ENCHANT

Price each, \$.90

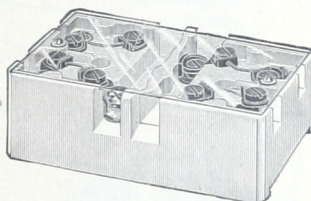


No. 1465, Code Word, ENDEAR

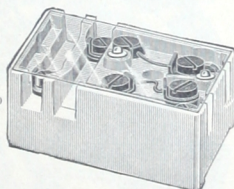
Price each, \$.77



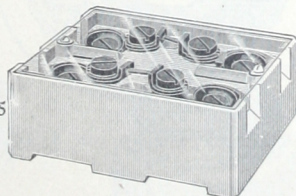
No. 1487, Code Word, ENDOW Price each, \$ 1.80



No. 2835, Code Word, ENGRAVE Price Each, \$ 1.10



No. 1565, Code Word, ENGROSS Price each, \$1.65



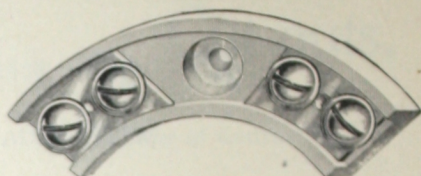
Please Order by Catalogue Code Word.

A. S. Knowles

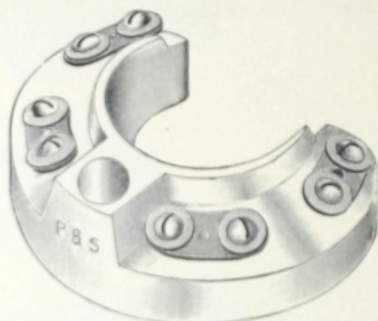
Porcelain Fixture Cut-outs.



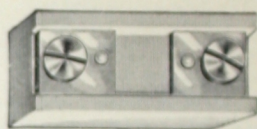
Code Word, ENGULF Single Pole, Price each, \$.10



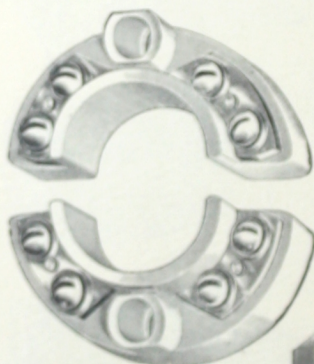
Code Word, ENHANCE Double Pole, Price each, \$.15



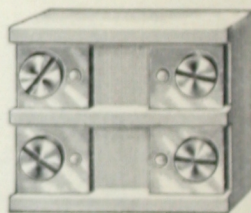
Code Word, ENJOY Double Pole, Price each, \$.10



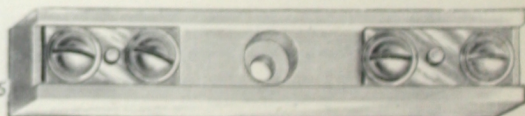
Code Word, ENJOIN
Single Pole, Midget, Price each, \$.10



Code Word, ENRAGE
Double Pole, Price Per pair \$.15



Code Word, ENLIST
Double Pole, Midget, Price each, \$.16



Code Word, ENRICH Single Pole, Price each, \$.14

Please Order by Catalogue Code Word.

A. S. Knowles

“CARTWRIGHT”

Water-proof Keyless Sockets.

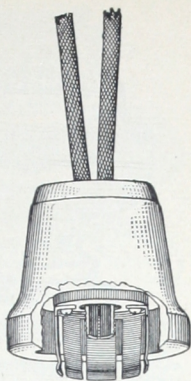
Patented Nov. 1st, 1892.

These **Sockets** are the **best** and **cheapest** of their
kind ever put on the market.

They are Fire, Water and Acid Proof.

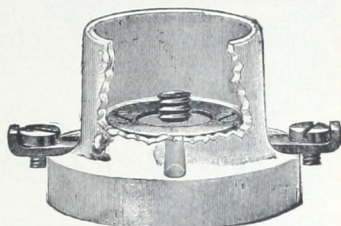
Code Word, ENROLL Thomson-Houston,
“ “ ENSCONCE Westinghouse,

Price each, \$.25
“ “ .25



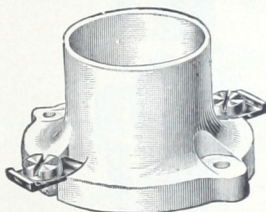
Porcelain Wiring Sockets.

Code Word, ENSLAVE Thomson-Houston, each, \$.25
“ “ ENSUE Westinghouse “ .25



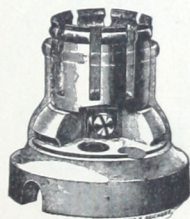
Cleat Porcelain Wiring Socket.

Code Word, ENTICE Thomson-Houston, Price each, \$.20
“ “ ENTOMB Westinghouse “ “ .20



Concealed and Moulding Wiring Socket.

Code Word, ENTRAIL Thomson-Houston, Price each \$.25
“ “ ENTRAP Westinghouse, “ “ .25

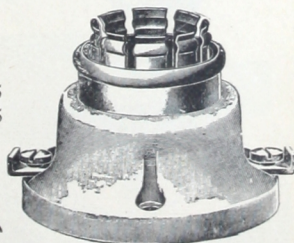


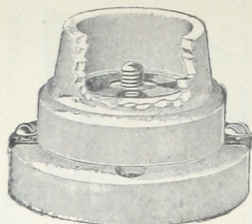
Shade Holder Receptacle

Code Word, ENTREAT Thomson-Houston Price each, \$.25
“ “ ENTREE Westinghouse “ “ .25

Please Order by Catalogue Code Word.

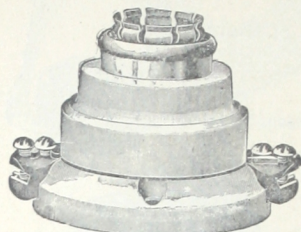
A. L. Knowles





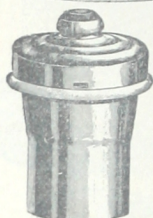
“B and D” Fusible Receptacle.

Code Word, ENTUNE	Thomson-Houston	Price each, \$.25
“ “ ENTWINE	Westinghouse	Price each, \$.25



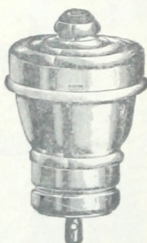
“B and D” ... Shade Holder Receptacle.

Code Word, ENTWIST	Thomson-Houston	Price each, \$.30
“ “ ENVOY	Westinghouse	“ “ .30

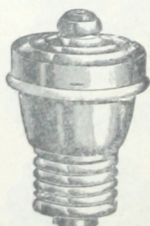


Attachment Plugs

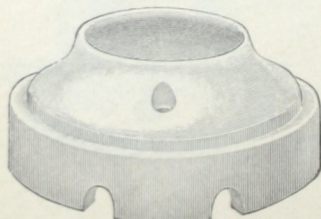
Fusible. All parts Brass and Porcelain.
Code Word, EPIC Thomson-Houston, Price each, \$.20



Code Word, EPOCH Westinghouse, Price each, \$.20



Code Word, EQUINE Edison, Price each, \$.20



Porcelain Wall Receptacles.

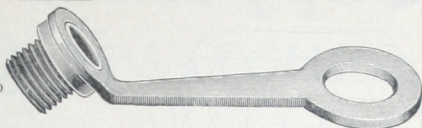
Code Word, ERASE	Thomson-Houston	Price each, \$.40
“ “ ERGOT	Westinghouse	“ “ .40

A. S. Knobel

✿ GAS ATTACHMENTS. ✿

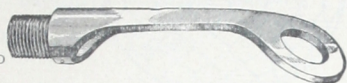
Code Word, ESCAPE

Price per 100, \$ 10.00



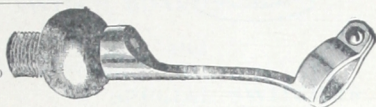
Code Word, ESCHEW

Price per 100, \$ 10.00



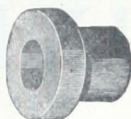
Code Word, ESCORT

Price per 100, \$ 10.00



Soft Rubber Bushing.

Code Word, ESPOUSE Price per 1000, \$ 5.00



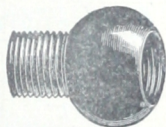
SOCKET BUSHINGS.

Code Word ESQUIRE Composition, Price per 1000, . . . \$ 6.00
 " " ESSAY Hard Rubber, " " 1000, . . . 20.00



SOCKET NIPPLES.

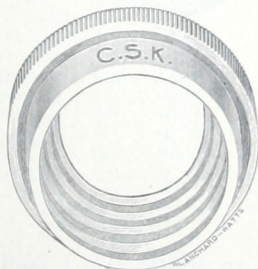
Code Word, ESTOP Composition, Price per 1000, \$ 12.00
 " " ETHER Hard Rubber, " " 1000, 40.00



✿ Socket Rings ✿



Code Word, ETHICS Porcelain, Price per 1000, \$ 30.00
 " " EVENT Hard Rubber, " " 1000, 40.00
 " " EVICT Composition, " " 1000, 20.00



Soft Rubber Socket Covers.

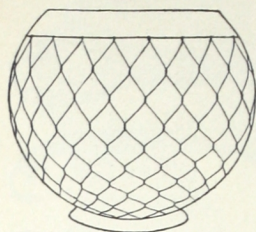
Code Word, EXALT Price per Gross \$ 15.00

Please Order by Catalogue Code Word.



A. S. Knowles

Copper = =



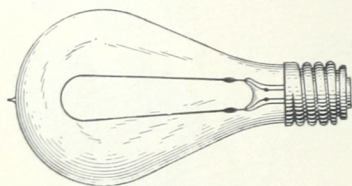
Arc Globe Nets

Code Word. FABLE Price Each, \$.20



IXL Lamps. —

Loop, Coiled or Anchored Filaments.



ANY BASE...

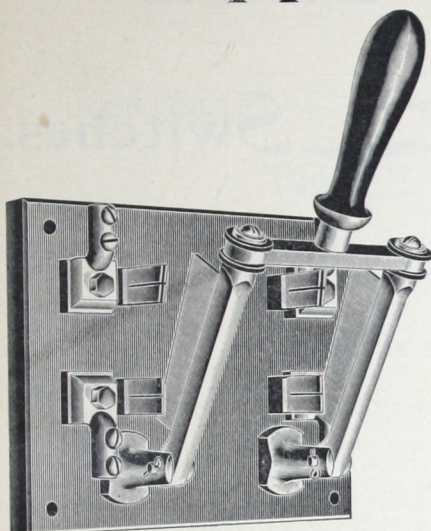
Code Word	FACADE	10 to	16	Candle	Power,	Each \$
" "	FAGOT	20	" "	" "	" "	.25
" "	FAIRY	24	" "	" "	" "	.30
" "	FALCON	32	" "	" "	" "	.40
" "	FALLOW	50	" "	" "	" "	.50
" "	FAMISH	75	" "	" "	" "	.85
" "	FARO	100	" "	" "	" "	1.50
						2.00

Can make our I X L Lamp any voltage and guarantee each and every lamp.

Please Order by Catalogue Code Word.

Pure Copper Blade SWITCHES

Mounted on Slate Bases.



SWITCH BOARDS
and
SPECIAL SWITCHES

Made to Order.

Estimates Gladly Given.

SINGLE POLE.

SINGLE THROW

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FATAL	25	\$2.50	\$3.00	\$3.10	\$3.75
FAUCET	50	3.00	3.50	3.75	4.50
FAUNA	75	3.75	4.50	4.70	5.80
FELINE	100	4.75	5.75	6.00	7.25
FELON	200	6.00	7.50	7.50	9.50
FENNEL	300	7.50	9.50	9.50	12.00
FERRET	400	9.50	12.00	12.00	15.00
FERRY	600	12.50	16.25	15.75	20.00
FERULE	800	17.50	20.00	23.00	25.00
FESTAL	1000	25.00	30.00	31.25	37.50

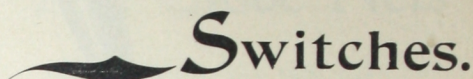
DOUBLE THROW

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FETICH	25	\$3.25	\$4.00	\$4.00	\$5.00
FETTER	50	4.00	4.75	5.00	6.00
FEUDAL	75	5.00	6.00	6.25	7.50
FEVER	100	6.25	7.50	7.75	9.35
FIAT	200	8.00	10.00	10.00	12.25
FIBRE	300	10.00	12.75	12.25	16.00
FICKLE	400	12.75	16.00	16.00	20.00
FIDDLE	600	16.75	21.75	21.50	27.00
FIFER	800	23.25	26.75	29.00	33.50
FIGMENT	1000	33.25	40.00	40.00	44.00

See Note on Second Page Following.

PURE COPPER BLADE

(CONTINUED.)



DOUBLE POLE.

SINGLE THROW

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FILIAL	25	\$5.00	6.00	\$6.10	\$7.50
FINIS	50	6.00	7.00	7.50	9.00
FINITE	75	7.50	9.00	9.40	11.60
FISCAL	100	9.50	11.50	12.00	14.50
FITFUL	200	12.00	15.00	15.00	19.00
FLACCID	300	15.00	19.00	19.00	24.00
FLANNEL	400	19.00	24.00	24.00	30.00
FLATTER	600	25.00	32.00	31.50	40.00
FLAVOR	800	35.00	40.00	46.00	50.00
FLEECY	1000	50.00	60.00	62.50	75.00

DOUBLE THROW

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FLICKER	25	\$6.50	\$8.00	\$8.00	\$10.00
FLINTY	50	8.00	9.50	10.00	12.00
FLIPPANT	75	10.00	12.00	12.50	15.00
FLOTSAM	100	12.50	15.00	15.50	18.70
FLORAL	200	16.00	20.00	20.00	24.50
FLUENT	300	20.00	25.50	24.50	32.00
FLURRY	400	25.50	32.00	32.00	40.00
FLUSTER	600	33.50	43.50	42.50	54.00
FOCUS	800	46.50	53.50	58.00	67.00
FODDER	1000	66.50	80.00	80.00	88.00

See note on following page.

Please Order by Catalogue Code Word.

PURE COPPER BLADE

(CONTINUED.)

Switches.

THREE POLE.

--- SINGLE THROW ---

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FOGGY	25	\$7.00	\$9.00	\$ 9.30	\$ 11.25
FOLLY	50	9.00	10.50	11.25	13.20
FONDLE	75	11.00	13.50	12.95	16.50
FOPPISH	100	14.00	17.00	17.40	21.00
FORAGE	200	18.00	22.50	21.75	27.00
FORCEPS	300	22.50	28.50	27.00	34.50
FOREST	400	28.50	36.00	34.50	44.25
FORUM	600	37.50	48.50	46.50	60.75
FOSSIL	800	52.50	60.00	66.00	75.75
FOSTER	1000	75.00	90.00	94.80	112.50

DOUBLE THROW

Code Word	Amperes	220 VOLTS		500 VOLTS	
		Plain	Polished	Plain	Polished
FRACAS	25	\$ 10.00	\$ 12.00	\$ 12.25	\$ 15.00
FRECKLE	50	12.00	14.00	15.00	17.50
FRENZY	75	15.00	18.00	18.75	22.50
FRIGID	100	19.00	23.00	23.75	28.75
FRIZZLE	200	24.00	30.00	30.00	37.50
FROLIC	300	30.00	38.00	37.50	47.50
FRONTAL	400	38.00	48.00	47.50	60.00
FROSTY	600	50.00	65.00	62.50	82.00
FROZEN	800	70.00	80.00	87.50	100.00
FRUGAL	1000	100.00	120.00	125.00	150.00

For Switches with Fuse Connections, add 25 per cent to above list.

“ “ “ Back “ for Switchboards (unmounted) use above list.

“ “ “ “ “ “ “ (mounted) add 10 per cent to above list.

NOTE.—The code words above refer only to capacity.

For 220 volt Switches use in addition FRUITFUL

“ 500 “ “ “ “ FRUMPISH

“ Fuse Connections “ “ “ FRUSTRATE

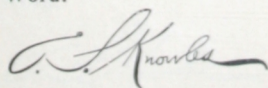
“ Back “ (unmounted) “ FRUTEX

“ “ “ (mounted) “ FUCATE

Also specify whether plain or polished. For example: a 220 v. 75 amp. D. P. S. T. Polished Switch would be “Fruitful Finite Polished.”

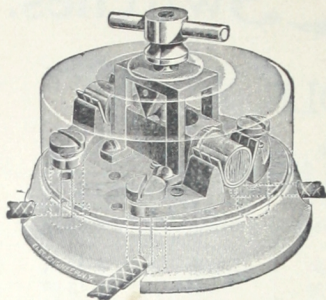
A 500 v. 200 amp. T. P. D. T. Plain Switch with Fuse Connections would be “Frumpish Frizzle Frustrate Plain.”

Please Order by Catalogue Code Word.



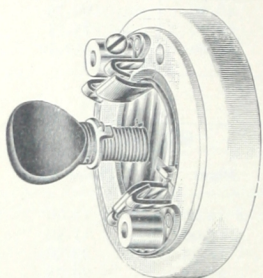
"NEW ENGLAND"

Double Pole Switches.



Code	Word, INAPT	5 Amperes, Price each	\$1.25
"	" INBRED 10	"	1.75
"	" INCUR 15	"	2.00
"	" INDULGE 25	"	2.80
"	" INERT 40	"	3.50
"	" INFANT 50	"	4.25
"	" INFORM 75	"	8.00
"	" INGULF 100	"	9.50
"	" INJURE 5	" (500 Volts.)"	1.25

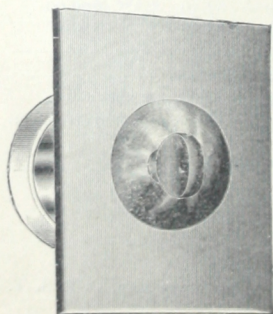
XNTRIC SWITCHES.



Code Word, INROAD Single Pole, 5 Amperes, Price each \$.30

"	" INSIGHT	"	" 10	"	"	.40
"	" INSPIRE	3-Point	10	"	"	.50
"	" INSTIL	Double Pole, 10	"	"	"	.75

XNTRIC FLUSH SWITCHES.



Code Word INSULT Single Pole, 5 Amperes, Price each, \$.90

"	" INTENSE	"	" 10	"	"	1.00
"	" INTORT	3-Point, 10	"	"	"	1.20
"	" INURE	Double Pole, 10	"	"	"	1.50
"	" INVENT	Single Pole, 5	"	lock	"	1.50
"	" INVOKE	"	" 10	"	"	1.60
"	" IRIS	3-Point 10	"	"	"	1.90
"	" ISLET	Double Pole, 10	"	"	"	2.00

Please Order by Catalogue Code Word.

A. S. Knowles

COMBINATION

Wire Lamp Guard.

Fits any Socket.

No Holder Required.

Code Word,	ITEM	Brass,	Price Per Gross,	\$18.00
" "	JACKAL	Tinned	" " "	18.00



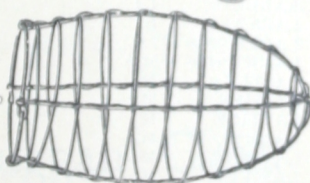
SOLID TINNED

WIRE LAMP GUARD.

Code Word: JANGLE, Price Per Gross, \$22.00



Code Word, JARGON Spiral, Price Per Gross, \$22.00



"Cartwright"

PAPER

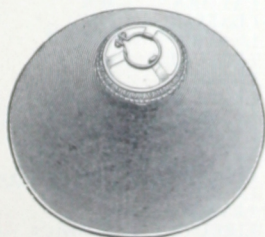
Waterproof Lampshade.

FOR ANY SOCKET.

These are made with the white and green surface, and *can be washed in either cold or lukewarm water without destroying the texture* of the fibre, the fibre being *thoroughly impregnated with a waterproof material*. Any *dust or fly-specks* that *can be removed* from any surface *can be removed* from *this Lamp Shade without injury* to the surface or fibre of same.

Code Word, JASPER Price Per Dozen, \$2.40

Please Order by Catalogue Code Word.



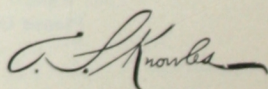
A. L. Knowles

Porcelain Insulators.

To avoid confusion, there being so many different list prices for insulators, we have appended a table so as to guide our customers in recognizing the insulator wanted as known by the different manufacturers.

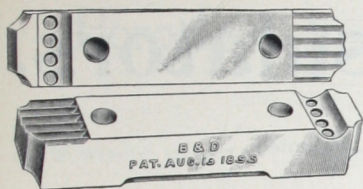
Code Word	Empire China Works Cat. No.	R. Thomas & Sons Co. Cat. No.	Union Porcelain Works. Cat. No.	Price per 1000
JEALOUS	A	4	4	\$8.00
JESTER	B	3		20.00
JETSAM	BB	30		32.00
JEWEL	C	5	5	5.25
JINGLE	D	9	9	5.00
JOCKEY	E1			3.60
JOCOSE	E2	6	6	3.60
JOCUND	E3	8	8	4.00
JOGGLE	E4	7	7	4.00
JOLLY	E5	11	11	5.25
JOSTLE	F	25		33.00
JOYFUL	F2	13		7.50
JUGGLE	FO (Unglazed)	39		40.00
JULEP	FD (same, glazed.)			42.00
JUNKET	HO	44	46	6.25
JUROR	H1	45	40	6.90
JUSTLY	H2	43		9.50
KEEPER	J1	59		15.00
KENNEL	J2	60		15.00
KETTLE	J3	62		7.50
KIDNEY	J4	61		7.50
KIDNAP	LO	82		40.50
KINDLE	L1	85		19.50
KIPPER	L2	54		9.50
KORAN	L3	55		17.50
LABEL	L4	56		18.50
LACKEY	L5	57		8.00
LADLE	L6	58		9.00
LANKY	MO			8.50
LASTLY	M1	49	19	8.50
LATHER	M2			16.50
LATTICE	M3	50		16.50
LAUREL	M4	51		17.00
LAVISH	M5	52	18	8.00
LAWYER	M6	53		8.50
LAYMAN	MM	63	17	8.50
LEAFLET	MMO	64		6.50
LEAVEN	MMX			15.00
LECTURE	N1	65	21	7.00
LEDGER	N2	66	20	6.50
LEGAL	N3	67		45.00
LEGEND	NX			13.50
LEMON	O	36	36	15.00
LEPER	U	83	4 M P	22.00
LESSEE	V	84	1 M P	33.00
LEVEL	XX	23	88	14.00
LEVITE	Z	24	24	20.00
LIBEL		0	0	120.00
LIKEN		10	10	9.00
LILAC		12	12	11.00

Please Order by Catalogue Code Word.



Porcelain Cleats.

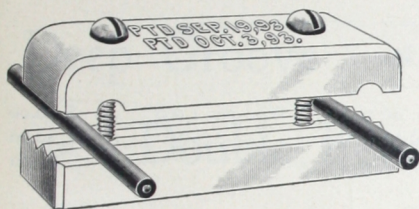
(GLAZED.)



“B and D” Cleat.
(New Style.)

Patented.

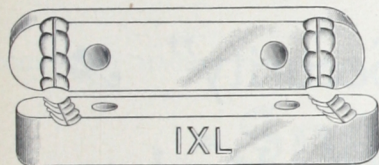
Code Word, LIMPET 2 wire, Price per 1000, \$30.00
“ “ LIMPID 3 “ “ “ “ 30.00



“B and D” Cleat.
(Old Style.)

Patented.

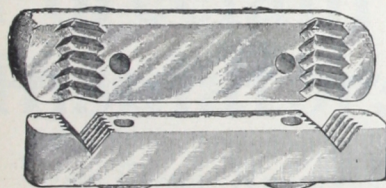
Code Word, LINDEN 2 wire, Price per 1000, \$ 30.00
“ “ LINGO 3 “ “ “ “ 30.00



I X L Cleat.

Patented.

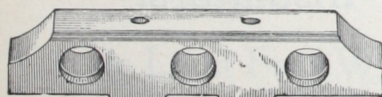
Code Word, LIQUOR 2 wire, Price per 1000, \$ 20.00
“ “ LITMUS 3 “ “ “ “ 20.00



Duggan Cleat.

Patented.

Code Word, LIVER 2 wire, Price per 1000, \$ 30.00
“ “ LOAFER 3 “ “ “ “ 30.00



Cartwright Cleat.

Patented.

Code Word, LOCAL 2 wire, Price per 1000, \$ 30.00
“ “ LOCKET 3 “ “ “ “ 30.00

Please Order by Catalogue Code Word.

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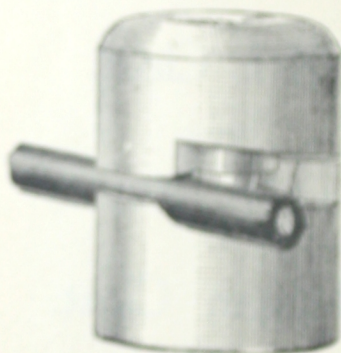
"B and D"

Insulators.



... Patented ...

CODE WORD	LIFTY	No. 1, No. 16 to No. 5 Wire per 1,000	\$ 30.00
CODE WORD	LUNAR	No. 2, No. 5 to No. 2 " " "	40.00
CODE WORD	LURID	No. 3, No. 2 to No. 4 " " "	60.00



"Security"

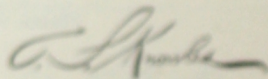
Insulators.

CODE WORD LUSTEE Price per 1,000, \$20.00

"Victor" Split Insulators.

CODE WORD LUREC Price per 1,000, \$40.00

Please Order by Catalogue Code Word.

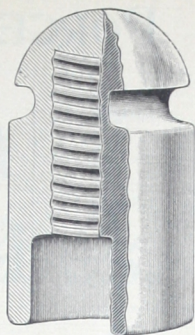


. Pony . Porcelain Insulators.

CODE WORD MAGIC

Price per 1000,

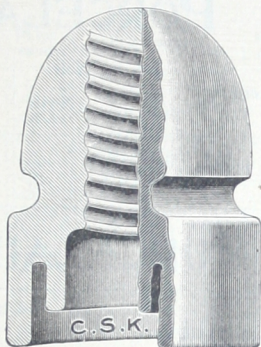
\$55.00



Deep Groove Double Petticoat Porcelain Insulator.

CODE WORD MAGNET

Price per 1000, \$ 120.00

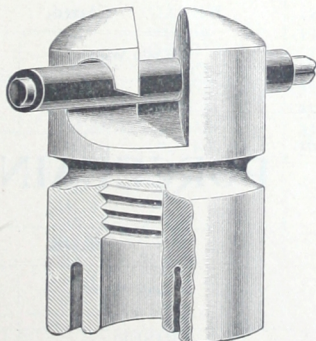


=Spanish= Porcelain :: Insulators.

For Street Railways

.. and ..

Electric Light Feed Wires.



CODE WORD MAIDEN
CODE WORD MAKER
CODE WORD MALICE

For No. 8 to No. 2 Insulated Wire, price per 1000 \$180.00
For No. 2 to 4-0 Insulated Wire, price per 1000 \$180.00
For No. 4-0 to 1000000 C. M. Price per 1000 \$180.00

Please Order by Catalogue Code Word.

A. S. Knowles

PORCELAIN WIRING TUBES.

Length.	5-16 in. Hole.		3-8 in. Hole.		5-8 in. Hole.	
	Code Word	Price	Code Word	Price	Code Word	Price
1 5-8 inches			MASON	16.00		
2 "	MANTLE	15.00	MATRON	16.00	MELLOW	26.00
2 1-2 "	MARGIN	16.00	MAXIM	18.50	MENTAL	28.50
3 "	MAROON	18.00	MAZY	20.00	MERCY	30.00
4 "	MARRY	20.00	MEAGRE	22.50	MERRY	32.50

PORCELAIN FLOOR TUBES.

Length.	3-4 in. Hole.		1 in. Hole.		1 1-4 in. Hole.		1 1-2 in. Hole.	
	Code Word.	Price each.	Code Word	Price each	Code Word	Price each	Code Word	Price each
4 inches	METHOD	.09	MIGRATE	.09	MILKY	.14	MIMIC	.14
6. "	MIDDLE	.15	MILDLY	.15	MILLER	.18	MINER	.18

PORCELAIN WINDOW TUBES.

Length.	3-8 in. Hole. (Unglazed)		3-8 in. Hole. (Glazed)	
	Code Word	Price each	Code Word	Price each
6 inches	MINGLE	.07	MINION	.09

PORCELAIN WINDOW TUBES.

(Curved ends.)

Glazed.		Unglazed.	
Code Word.	Price each	Code Word.	Price each
MINSTER	.07	MIRROR	.05

PORCELAIN AWNING TUBES.

(Curved.)

Glazed.		Unglazed.	
Code Word.	Price each	Code Word.	Price each
MISER	.07	MISFIT	.05

Please Order by Catalogue Code Word.

A. S. Knowles

Large Porcelain Tubes.

Length.	5-16 x 5-8		3-8 x 3-4		1-2 x 1	
	Code Word	Price each	Code Word	Price each	Code Word	Price each
5 inches	MISHAP	.03	MORMON	.04	MUSIC	.10
6 "	MISRULE	.04	MORTAL	.05	MUSLIN	.12
7 "	MISTER	.05	MORTISE	.06	MUSTER	.14
8 "	MITRE	.06	MOSLEM	.07	MUTTER	.16
9 "	MOCHA	.07	MOTION	.08	MUZZLE	.18
10 "	MODEL	.08	MOTLEY	.09	MYRTLE	.20
11 "	MODISH	.12½	MOTTO	.13½	MYSTIC	.27½
12 "	MOGUL	.14	MOUSER	.15	NABOB	.30
13 "	MOHAIR	.15½	MUDDLE	.16½		
14 "	MONAD	.17	MULISH	.18		
15 "	MONGREL	.18½	MUMBLE	.19½		
16 "	MOODY	.20	MUMMY	.21		
17 "	MORAL	.21½	MURDER	.22½		
18 "	MORBID	.23	MUSCLE	.24		

Length.	1-2 x 1 1-8		5-8 x 1 1-8		3-4 x 1 1-2	
	Code Word	Price each	Code Word.	Price each	Code Word.	Price each
5 inches			NESTLE	.10	OAKUM	.12½
6 "			NEUTER	.12	OBESE	.15
7 "			NIBBLE	.14	OBLONG	.17½
8 "			NIPPERS	.16	OBVERT	.20
9 "			NITRIC	.18	OCCULT	.22½
10 "			NOBLE	.20	OCCUR	.25
11 "			NOISY	.27½	OCEAN	.33
12 "			NOMAD	.30	OCHRE	.36
13 "	NAPTHA	.32½	NORMAL	.32½		
14 "	NAPKIN	.35	NOSTRIL	.35		
15 "	NATAL	.37½	NOURISH	.37½		
16 "	NATION	.40	NOVEL	.40		
17 "	NATURE	.42½	NOVICE	.42½		
18 "	NAVAL	.45	NOXIOUS	.45		
19 "	NAVY	.47	NUGGET	.47½		
20 "	NEEDLE	.50	OAKEN	.50		

Please Order by Catalogue Code Word.

A. S. Knowles

Large Porcelain Tubes.

(CONTINUED.)

Length.	3-4 x 1 3-4		1 x 1 3-4	
	Code Word.	Price each.	Code Word.	Price each.
5 inches			OSIER	.12½
6 "			OUTER	.15
7 "			OUTLAW	.17½
8 "			OUTWIT	.20
9 "			OVAL	.22½
10 "			OVEN	.25
11 "			OVERT	.33
12 "			OYSTER	.36
13 "	ONYX	.39	OZONE	.39
14 "	OPAL	.42	PACER	.42
15 "	ORBIT	.45	PACHA	.45
16 "	ORCHID	.48	PACKET	.48
17 "	ORDEAL	.51	PADDLE	.51
18 "	ORGAN	.54	PAGEANT	.54
19 "	ORGIES	.57	PALACE	.57
20 "	ORNATE	.60	PALATE	.60

Length.	1 1-4 x 2 1-8		1 1-2 x 2 1-8	
	Code Word.	Price each.	Code Word.	Price each.
5 inches	PALFREY	.15	RETAIN	.15
6 "	PALLET	.18	RETORT	.18
7 "	PALSEY	.21	REVEL	.21
8 "	PAMPER	.24	REVISE	.24
9 "	PANTRY	.27	REVOLVE	.27
10 "	PAPAL	.30	RHENISH	.30
11 "	PAPPOOSE	.38½	RIBBON	.38½
12 "	PARADE	.42	RIDER	.42
13 "	PARBOIL	.45½	RIGGER	.45½
14 "	PARCEL	.49	RIVAL	.49
15 "	PARDON	.52½	RIVET	.52½
16 "	REPRINT	.56	ROBBER	.56
17 "	REPEAT	.59½	ROBIN	.59½
18 "	REPUTE	.63	ROCKET	.63
19 "	RESCUE	.66½	ROLLER	.66½
20 "	RESIGN	.70	ROMAN	.70

Please Order by Catalogue Code Word.

A. S. Knowles

Vitrified Earthenware Tubes.

(BROWN OR WHITE GLAZE.)

Length. (inches)	5-16 x 5-8		3-8 x 3-4		1-2 x 7-8		5-8 x 1	
	Code Word.	Price 1000	Code Word.	Price 1000	Code Word.	Price 1000	Code Word.	Price 1000
1	ROSIN	7.50	RUMOR	7.50				
2	ROVER	8.00	RUMPUS	10.00	SAILOR	12.00	SANSCRIT	15.00
3	ROYAL	10.00	RUSTIC	12.00	SALINE	15.00	SARDINE	18.00
4	RUBBISH	12.00	SABRE	14.00	SALLOW	18.00	SATCHEL	22.00
5	RUBRIC	20.00	SABLE	25.00	SALMON	30.00	SATIRE	35.00
6	RUDDER	25.00	SACHEM	30.00	SALTISH	35.00	SATRAP	40.00
8	RUFFLE	32.00	SACRED	40.00	SALVER	50.00	SATURN	54.00
10	RUMBLE	40.00	SADDLE	55.00	SANCTUM	65.00	SATYR	70.00
12			SAFFRON	80.00	SANDAL	90.00	SAUCY	100.00
14					SANDY	105.00	SAVANT	125.00
16							SAXON	135.00

Length (inches)	3-4 x 1 1-8		1 x 1 1-2		1 1-4 x 1 3-4		1 1-2 x 2 1-4	
	Code Word.	Price 1000	Code Word.	Price 1000	Code Word.	Price 1000	Code Word.	Price 1000
3	SCANDAL	23.00	SENATE	28.00				
4	SCARLET	25.00	SENTRY	35.00	SHEKEL	80.00	SINEW	100.00
5	SCEPTIC	40.00	SEPOY	45.00	SHERBET	90.00	SINNER	140.00
6	SCEPTRE	45.00	SERAPH	50.00	SHINY	100.00	SIREN	160.00
8	SCRAGGY	60.00	SERENE	70.00	SHIVER	120.00	SIRLOIN	200.00
10	SEANCE	80.00	SERVILE	90.00	SHUDDER	160.00	SIRUP	240.00
12	SECTOR	105.00	SETTEE	130.00	SHUTTLE	240.00	SKEWER	360.00
14	SEDAN	145.00	SEXTON	170.00	SIBYL	280.00	SKIPPER	420.00
16	SELTZER	155.00	SHAGGY	180.00	SIFTER	320.00	SLANDER	480.00
18			SHAKER	200.00	SILEX	350.00	SLAVER	560.00
20			SHAMMY	225.00	SILVER	400.00	SLIPPER	600.00
24			SHAVER	275.00	SIMOON	480.00	SLUMBER	700.00

Please Order by Catalogue Code Word.

A. S. Knowles

HARD Rubber Tubing.

Code Word,	Smatter	Insulating Grade, per Pound, \$.40
Code Word,	Smitten	Flexible per Pound, \$.50

HARD RUBBER Window Tubes.

Code Word,	SMUTTY	$\frac{1}{4}$ x $1\frac{1}{2}$ in. long,	Price per 1000, \$ 20.00
" "	SNAFFLE	$\frac{1}{4}$ x $2\frac{1}{2}$ " " " " " "	22.50
" "	SNAGGY	$\frac{1}{4}$ x 3 " " " " " "	30.00
" "	SNEERER	$\frac{1}{4}$ x 4 " " " " " "	35.00
" "	SNIVEL	5-16 x $1\frac{1}{2}$ " " " " " "	20.00
" "	SNOWY	5-16 x $2\frac{1}{2}$ " " " " " "	25.00
" "	SNUFFLE	5-16 x 3 " " " " " "	30.00
" "	SOBER	5-16 x 4 " " " " " "	35.00
" "	SOCIAL	$\frac{3}{8}$ x $2\frac{1}{2}$ " " " " " "	30.00
" "	SODA	$\frac{3}{8}$ x 3 " " " " " "	35.00
" "	SOIREE	$\frac{3}{8}$ x 4 " " " " " "	40.00
" "	SOLACE	$\frac{5}{8}$ x 3 " " " " " "	50.00
" "	SOLO	$\frac{5}{8}$ x 4 " " " " " "	60.00

Please Order by Catalogue Code Word.

A. S. Knowles

TELEGRAPH CODE.

We would respectfully request our customers when telegraphing us to use the following code in connection with the code words for the various goods on preceding pages.

The words in each list are in alphabetical order. Those on preceding pages consist of two syllables each and those in following table, of three syllables. If these points are borne in mind it will be a very easy matter to interpret all telegrams in which our code is used.

Example: "Sorcery, Obstacle, Nutritive, Yards, Bedew, Impetus, Decency, Destiny, Same, Apathy." This translated reads: "When can you make first shipment and how soon complete order covering twenty-five hundred yards No. 18 Silk Covered Lamp Cord. Very important there must be no delay. What discount will you allow on same? Answer by wire immediately."

ACKNOWLEDGE.

CODE WORDS.

ABACUS.	Acknowledge by mail
ABANDON.	" " wire
ABATIS.	" receipt of
ABDOMEN.	Complying with your request we hereby acknowledge receipt of your letter
ALBINO.	Complying with your request we hereby acknowledge receipt of your telegram

ADVISE.

ALIBI.	Advise by mail concerning
ALKALI.	" " wire "
ALPACA.	Will advise you later concerning

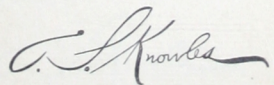
ALLOW.

AMAZON.	Can allow
AMULET.	Cannot allow
ANAGRAM.	Can you allow

ANSWER.

ANIMAL.	Answer by mail
APATHY.	" " wire immediately
APRICOT.	Answering your letter of
ARABIC.	" " telegram of
ARMADA.	Have answered you fully by letter
ARMORY.	Have no answer about
ARSENIC.	We await an answer to our letter of . . . please telegraph at once
ASPIRANT.	We await an answer to our letter of
AURORA.	" " " " " " telegram of

Please Order by Catalogue Code Word.



CODE WORDS.

CANCEL.

CABARET.	Cancel order for
CADAVÉR.	Has been cancelled
CALCULUS.	Is it too late to cancel
CALUMNY.	It is not too late to cancel
CANARY.	It is too late to cancel
CANISTER.	Shall we cancel
CARAMEL.	Too late to be cancelled, goods already shipped

COMPLIANCE.

CELERY.	Compliance with your request is impossible
CHARIOT.	In compliance with our letter of
CHIMERA.	" " " your letter of

COST.

CITADEL.	The cost is
COLONY.	What is the cost of
COURIER.	Will wire as soon as we ascertain what the cost will be

DELAY.

DAFFODIL.	Delay is caused by
DEBATER.	Delay will be explained by letter
DECENCY.	There must be no delay
DECORUM.	What is the cause of the delay

DETAILS.

DEFENDER.	Want further details by wire as to
DEFIANCE.	When can you send details of
DEITY.	Will send you details

DISCOUNT.

DENIZEN.	Discount is
DESTINY.	What discount will you allow on
DIADEM.	Will you allow . . . discount on

DO-DONE.

DIALECT.	Best we can do is
DIAMOND.	Can you do it
DIARY.	Do nothing in the matter of . . . until you hear from us
DIGNITY.	" " until you hear from us
DIOCESE.	Have you done anything in relation to
DIPLOMA.	If you cannot do better
DISTEMPER.	Is this the best you can do
DOMESTIC.	Shall we do anything about
DOMICILE.	" " " it
DOMINO.	To late to do anything
DRAPERY.	What has been done
DUCATOON.	What shall we do
DUELLO.	Will do it
DUENNA.	Will do nothing until we hear from you
DUPION.	Will do the best we can

DUPLICATE.

DURITY.	Duplicate under way
DYNASTY.	Send duplicate at once

Please Order by Catalogue Code Word.

A. S. Knowles

CODE WORDS.

EBONY.	Have you not made an error
EDIFICE.	There is an error
EFFIGY.	There is no error
ELEGY.	Where is the error to which you refer

EXCEPTION.

EMBARGO.	With the exception of
----------	-----------------------

EXPLANATION.

ENEMY.	We explain fully by letter
EPICURE.	What explanation can you give
EQUINOX.	Wire full explanation
ESCAPADE.	Write full explanation

FURNISH.

FALLACY.	Can furnish
FLAMINGO.	Cannot furnish
FUNERAL.	Can you furnish

GOODS.

GALLERY.	Goods have arrived
GONDOLA.	" have not arrived
GRADUATE.	Will take the goods
GUNNERY.	Will not take the goods

HEARD.

HARLEQUIN.	Have heard of
HARMONY.	Have heard that
HERALDRY.	Have you heard anything of
HERITAGE.	Have you heard that
HOMINY.	What do you hear about
HORIZON.	" " " " from

IMPORTANT.

ICICLE.	If it is important
IDIOT.	Is it important
IMAGERY.	It is important
IMMORTAL.	It is not important
IMPETUS.	Very important

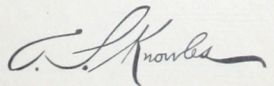
INFORM-INFORMATION.

INCISOR.	Can you inform us why
INCUBUS.	Further information by mail
INDIGO.	Give us definite information, your answer is vague
INDUSTRY.	Inform us by wire
INFAMY.	" " " wire, night message
INFIDEL.	Inform us fully by mail
INNOCENCE.	Why do you not send the information as per ours of
INTESTINE.	" " " " " " " promised in yours of

INSTRUCTIONS.

INTRUDER.	Are awaiting instructions from you about
INVADER.	Await further instructions before sending
IODINE.	" shipping instructions
IRONY.	Cannot send instructions by wire, will write
IRRITANT.	Instructions by letter
IVORY.	Not according to instructions

Please Order by Catalogue Code Word.



CODE WORDS.

KIND.

KATYDID.	Do you want same kind as last
KEROSENE.	Same kind as last
KNAVERY.	What kind do you want

LETTERS (See also Mail)

LABORER.	As per our letter of
LABYRINTH.	" " their letter of
LADYBUG.	" " your letter of
LAMINA.	Awaiting reply to our letter of
LATITUDE.	Await our letter of
LAUDANUM.	Do not understand your letter of
LAUREATE.	Give particulars by letter
LEGACY.	Have you received our letter of . . . about
LEMONADE.	Have no letter from you since that dated
LEPROSY.	Have you written in reference to
LETHARGY.	Have not received your letter of
LEVITY.	Have not written in reference to . . . but will do so by next mail
LEXICON.	Have received your letter of
LIBERTY.	Have no letter from you dated
LICORICE.	Mailed important letter today concerning
LIGAMENT.	" " you a letter containing
LIMONITE.	Mentioned in our letter of
LINEAGE.	" " your letter of
LINIMENT.	Referring to your letter in regard to
LITURGY.	" " our letter in regard to
LIVERY.	" " your letter of
LOCALISM.	" " our letter of
LOLLIPOP.	See our letter of
LONGITUDE.	" " " " today
LOYALTY.	To what letter do you refer
LULLABY.	We await an answer to our letter of
LUMBAGO.	We refer to our letter of
LUTHERAN.	We refer to your letter of

MAIL (See also Letters.)

MACAROON.	Acknowledge by mail
MACKEREL.	Advise us by mail
MAGAZINE.	We mail you today \$
MAGISTRATE.	When can you mail
MAJESTY.	When did you mail

NECESSARY.

MALADY.	Absolutely necessary
MALAGA.	Do you think it is necessary
MANACLE.	If necessary
MANATUS.	If not necessary
MANDAMUS.	Is it necessary
MANDARIN.	It is necessary
MANGANESE.	It is not necessary

NEED.

MANIAC.	Are in urgent need of
MANILLA.	Are you in need of
MANOEUVRE.	Wire just what is needed

Please Order by Catalogue Code Word.

C. S. Knowles

CODE WORDS.

MANUAL.	Have not notified
MARAUDER.	Have notified
MARIGOLD,	Have you notified

NOTIFY.

NUMERALS.

MARINER.	1-64	MISNOMER.	32
MARMALADE.	1-32	MISTLETOE.	33
MARMOSET.	3-64	MITTIMUS.	34
MARTELLO	1-16	MIZZENMAST.	35
MARTINGALE	3-32	MOCCASIN.	36
MARTINMAS.	1-8	MOCKERY.	37
MASONRY.	3-16	MODESTY.	38
MASQUERADE	1-4	MODICUM.	39
MASSACRE.	5-16	MOLASSES.	40
MASTERY.	3-8	MOLECULE.	41
MATADORE.	7-16	MOMENTUM.	42
MATINEE.	1-2	MONARCHY.	43
MATRICIDE.	9-16	MONITOR.	44
MECHANIC.	5-8	MONODY.	45
MEDALLION.	11-16	MONOGRAM.	46
MEDICINE.	3-4	MONOLITH	47
MEDIUM.	13-16	MONOLOGUE.	48
MEDUSA.	7-8	MONOTONE.	49
MELODY.	15-16	MONUMENT.	50
MEMENTO.	1	MOODINESS.	51
MEMORY.	2	MORALIST.	52
MENDICANT.	3	MORMONISM.	53
MENHADEN.	4	MOROCCO.	54
MERCURY.	5	MORPHEUS.	55
MERINO.	6	MOSQUITO.	56
MERRIMENT.	7	MOUNTEBANK.	57
MESSIAH.	8	MUCILAGE.	58
METALLIST.	9	MUDDINESS.	59
METAPHOR.	10	MULATTO.	60
METAPHRASE.	11	MULBERRY.	61
METEOR.	12	MULETEER.	62
METHODIST.	13	MULTIPLE.	63
METRONOME.	14	MULTITUDE.	64
MIASMA.	15	MUMMERY.	65
MICROCOSM.	16	MURDERER.	66
MICROPHONE.	17	MUSCATEL.	67
MICROSCOPE.	18	MUTINEER.	68
MIDSHIPMAN.	19	MUTINY.	69
MILITIA.	20	MYSTICISM.	70
MILLINER.	21	NAIVETE.	71
MIMICRY.	22	NAKEDNESS.	72
MINERVA.	23	NARCISSUS.	73
MINISTER.	24	NARCOTIC.	74
MINISTRY.	25	NARRATIVE.	75
MINSTRELSY.	26	NARRATOR.	76
MINUEND.	27	NASTINESS.	77
MINUET.	28	NAUTILUS.	78
MIRACLE.	29	NAZARENE.	79
MISERY.	30	NEBULA.	80
MISFORTUNE.	31	NECROPSY.	81

Please Order by Catalogue Code Word.

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CODE WORDS.

NECTARINE.	82
NEMALITE.	83
NEOPHYTE.	84
NEPOTISM.	85
NEWSPAPER.	86
NICETY.	87
NIHILIST.	88
NIMBLENESS.	89
NINCOMPOOP.	90
NITROGEN.	91
NOBLEMAN.	92
NOBLENES.	93
NOMINEE.	94
NOTARY.	95
NOVELIST.	96
NOVELTY.	97
NUCLEUS.	98
NUDITY.	99
NUNCIO.	100
NUNNERY.	200
NURSERY.	300
NUTRIMENT.	400
NUTRITIVE.	500
OBEISANCE.	600
OBELISK.	700
OBLATION.	800
OBLOQUY.	900
OBSEQUIES.	1000
OBSTACLE.	2000
OBTRUSION.	3000
OCCIDENT.	4000
OCCIPUT.	5000

ORIGIN.
ORIOLE.
ORION.
ORISON.

Cannot obtain
Can obtain
If you can obtain
If you cannot obtain

ORNAMENT.
ORPHANAGE.
ORPHEUS.
OSMIUM.
OSSICLE.
OSTRACISM.
OVATION.
OVERCOAT.
OVERTURE.
OVOLO.
OXYGEN.

Accept order for
Cannot accept order for
Can ship immediately on receipt of order
Cancel the order for
Change order for . . . to . . .
Do not lose any orders for . . . on account of price
Do not accept order for
Order not yet received
Order received
We have completed your order
We will complete your order

PRIORY.
PAGODA.
PARODY.

What price must we make to secure order
Best price we can name on . . . is
Can you reduce price on

NUMERALS.

OCCCLUSION.	6000
OCCUPANT.	7000
OCTAGON.	8000
OCTAVO.	9000
OCTOPUS.	10000
ODDITY.	15000
ODIUM.	20000
ODYSSEY.	25000
OFFENDER.	30000
OFFERING.	35000
OLIBAN.	40000
OMEGA.	45000
OMELET.	50000
OMNIBUS.	55000
OPERA.	60000
OPiate.	65000
OPIUM.	70000
OPOSSUM.	75000
OPPONENT.	80000
OPPRESSOR.	85000
OPTIMIST.	90000
ORACLE.	95000
ORATION.	100000
ORATOR.	200000
ORCHESTRA.	300000
ORDINANCE.	400000
ORDINATE.	500000
ORGANISM.	600000
ORGANIST.	700000
ORIEL.	800000
ORIENT.	900000
ORIFICE.	1000000

OBTAIN.

ORDER.

PRICE.

Please Order by Catalogue Code Word.

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CODE WORDS.

PEONY.
PIRACY.
POPERY.
PORTICO.

Can reduce price to
Cannot reduce price
Quote by return mail lowest price on
Telegraph lowest price on

RECEIVE.

RECTORY.
REVOLVER.
ROTUNDA.

Have not yet received
Have received
Have you received

SAMPLE.

SACRAMENT.
SACRIFICE.
SACRILEGE.
SACRISTY.
SAGAMORE.
SALIVA.
SANCTITY.

Must be fully equal to sample
Must see sample
Not equal to sample
Sample has been sent
Sample has not been received
Send sample of
When will you send sample

SELL.

SASSAFRAS.
SATELLITE

At what price can you sell
Can sell at

SEND-SENT.

SATINET.
SCAPULA.
SCENERY.
SECLUSION.
SEDIMENT.
SEMITONE.
SENATOR.
SENTINEL.
SEPIA.
SERAPHIM.
SERVITOR.
SHILLALY.
SILLABUB.
SINECURE.
SIROCCO.
SOLECISM.

Have sent
Have you sent
How much can you send
" " did you send
Send at once
" by express
" " freight
" " return mail
Shall we send
We send today by express
" " " " freight
" " " " mail
When did you send
When will you send
Why do you not send
Will send by . . . on

SHIPMENT.

SOLITAIRE.
SOLITUDE.
SONATA.
SOPHISTRY.
SOPRANO.
SORCERER.
SORCERY.

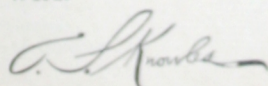
Can make shipment inside of
Hasten shipment of
Immediate shipment
Send tracer for shipment of
Shipment made
When can you make shipment of
" " " " first shipment and how soon
complete order covering

SHIP-SHIPPING.

SPECTACLE.
STALACTITE.
STAMINA.
STEVEDORE.

Await shipping instructions
By what route was shipment made
Can ship on receipt of order
Can ship in . . . days

Please Order by Catalogue Code Word.



CODE WORDS.

STILETTO.
STIMULANT.
STIMULUS.
STOICISM.
STOMACHER.
SURGERY.
SURVEYOR.
SYCAMORE.
SYLLABUS.
SYMMETRY.
SYMPATHY.
SYMPHONY.
SYNAGOGUE.
SYNCOPE.
SYNONYM.
SYNTHESIS.

TANNERY.
TENEMENT.
TRICINA.
TRINITY.

WICKEDNESS.
WILDERNESS.
WOLVERINE.
WORSHIPER.

SHIP-SHIPPING.

Can you ship at once
Can you ship within a few days
Cannot ship before
Did you ship as promised
Have shipped
Have you shipped
How much can you ship
" " did you ship
" soon can you ship
Ship at once by
Shipped . . . days ago we are tracing
Telegraph at once when you can ship
They have been shipped
When did you ship
" will you ship
Will ship by

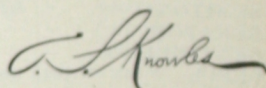
TELEGRAMS.

Awaiting answer to our telegram of
In accordance with your telegram
Message is unintelligible please repeat
Telegram received and shall have immediate attention

WRITING.

Have you written
We wrote you on . . . and await answer
Will write with particulars today
Write fully

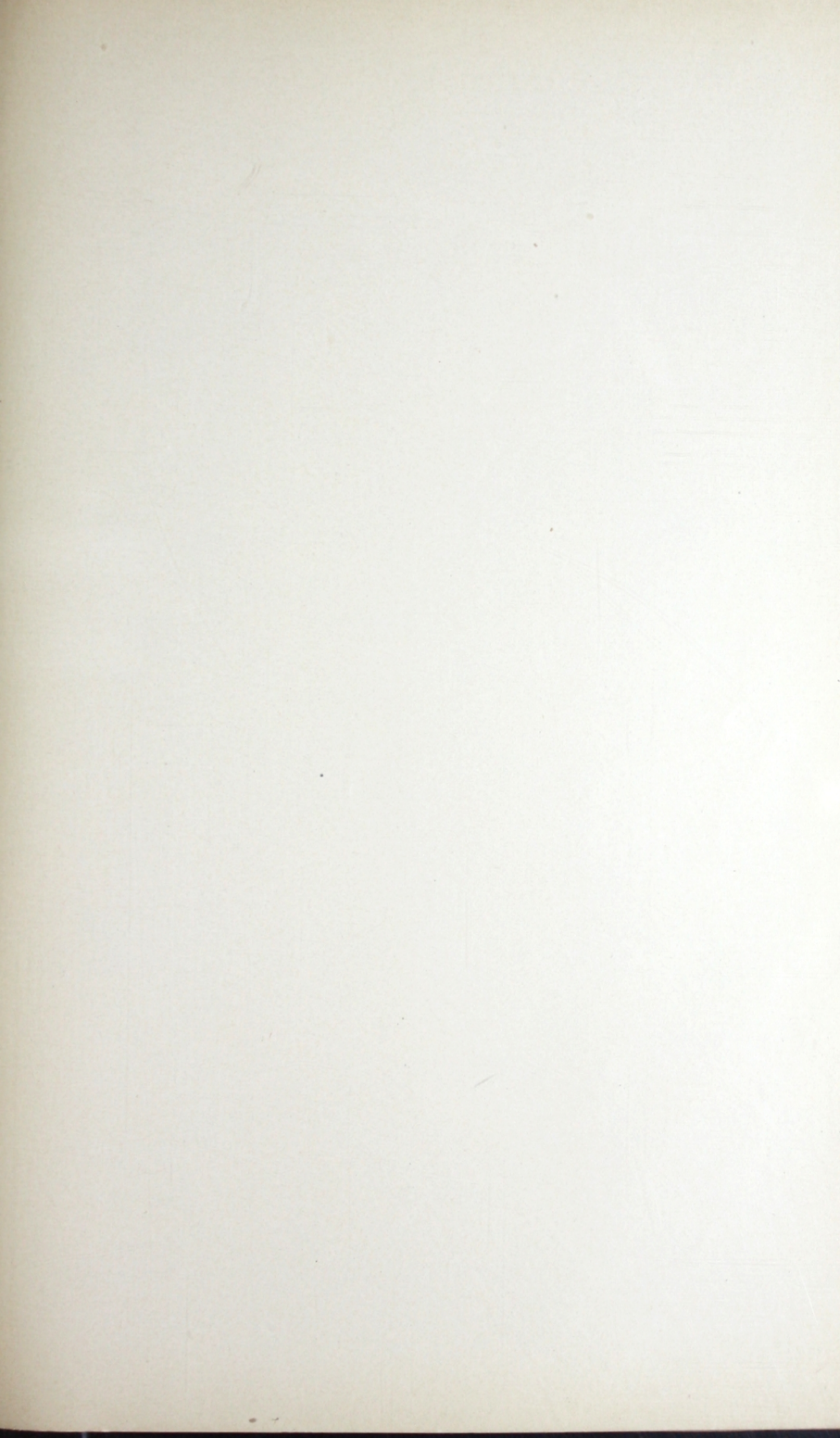
Please Order by Catalogue Code Word.



INDEX.

	PAGE.		PAGE.
Armalac	19	Porcelain Cleats	43-44
Asbestos	24	" Insulators	25, 42, 44-45
Attachments, Gas	35	" Tubes	25, 46-48
Attachment Plugs	34	Pressboard	21
Bushings, Socket	35	Receptacles, Lamp	33, 34
Cable, Columbia Flexible	7	Red Rope Paper	21
" Controller	25	Rings, Sockets	35
" Interior Conduit	7	Rosettes	27-29
" Metallic Shielded	10-11	Rubber, Hard	22, 50
" Street Car	7	" Soft	22, 22
" Underground	26	Rubber Packing	23
Cement, Gas Fitters	18	Shades, Paper	41
Chatterton Compound	18	Sheathing, Asbestos	24
Circuit Boards	30	Sockets	27, 33-34
Clay Tubes	49	Socket Bushings	35
Cleats, Porcelain	43-44	" Covers	35
Cloth, Insulating	21	" Nipples	35
Code, Telegraph	51-58	" Rings	35
Compound, Chatterton	18	Splicing Compound	16
" Splicing	16	Switches	37-40
Controller Cable	25	Table of Wire Gauges	14
" " Hose	25	Tape, Armature	17-18
Cord, Knowles Pendant	9	" Cotton	18
" Lamp	8	" Friction	15, 17
" Soft Rubber	22	" Linen	18
Cotton Hose	25	" Paragon	18
Covers, Socket	35	" Pure Gum	16
Cut Outs	30-32	Telegraph Code	51-58
Earthenware Tubes	49	Tissue Paper	21
Enamelac	19	Tubes, Clay or Earthenware	49
Flexible Hard Rubber Tubing	50	" Hard Rubber Window	50
Fullerboard	21	" Porcelain	25, 46-48
Gas Attachments	35	Tubing, Cloth Insertion	23
Gas Fitters Cement	18	" Flexible Hard Rubber	50
Globe Nets	36	" Hard Rubber	22, 50
Guards, Lamp	41	" Soft "	23
Hose, Cotton and Linen	25	Underground Cable	26
Incandescent Lamps	36	Wall Receptacles	33, 34
Insulating Cloth	21	" Sockets	27
" Paper	21	Wire, Columbia Braided Black	
Insulators, Porcelain	25, 42, 44, 45	Core	5
Knowles Pendant Cord	9	" Columbia Braided Black	
Lamp Cord	8	Core, Flexible	7
" Guards	41	" Columbia Braided White	
Lamps, Incandescent	36	Core	3
Leatheroid	21	" Columbia Taped Black	
Linen Hose	25	Core	6
Manilla Rope Paper	21	" Columbia Taped White	
Millboard, Asbestos	24	Core	4
Nipples, Socket	35	" Concentric	7
Nets, Globe	36	" Electrolier	9
Oiled Cloth	21	" Metallic Shielded	10-11
" Paper	21	" Rubber Covered	3-7
Packing	22	" Twin	7
Paint	19-20	" Weatherproof	11-13
Paper, Insulating	21	Wire Lamp Guards	41
Pendant Cord	9	Wire, Table of Gauges	14
Plugs, Attachment	34		

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